

**TRUSCON**  
  
**BUILDING  
PRODUCTS.**

**HAND BOOK**

ИКОНОГРАФИЯ  
ДИЛУИДИУМ  
РІСОВОГО  
ЗООВІДОВАННЯ

15<sup>00</sup>

# TRUSCON BUILDING PRODUCTS



1928 EDITION

TRUSSSED CONCRETE STEEL COMPANY  
OF CANADA LIMITED

WALKERVILLE, ONT.

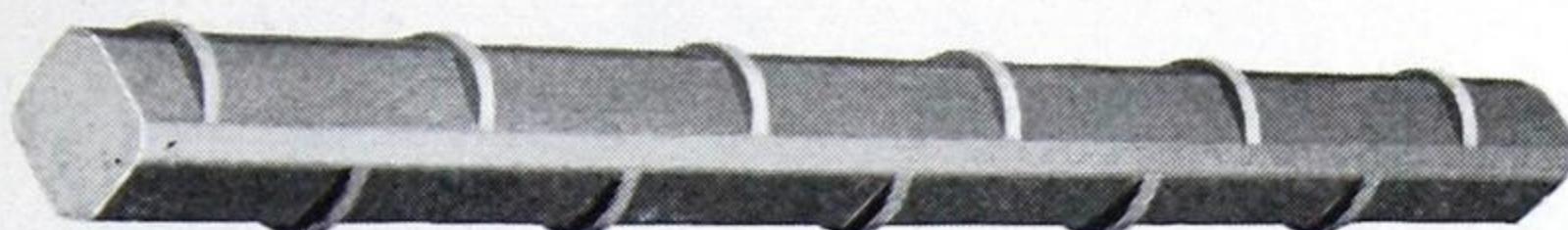
HEAD OFFICE: WALKERVILLE, ONTARIO

BRANCHES:

MONTREAL:	803 Castle Building.
OTTAWA:	Canada Engineering & Construction Co.
TORONTO:	1112 Federal Building.
HALIFAX:	Care W. H. Noonan, Roy Bldg.
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## TABLE OF CONTENTS

	Page
Rib Bars.....	3
Floretyle Construction.....	4-13
Column Hooping.....	14
O-T Steel Joist.....	15-18
P-G Steel Joist.....	19
Accessories for Concrete Construction.....	20
Pressed Steel Inserts.....	21-22
$\frac{3}{8}$ " Hy-Rib.....	23-24
$\frac{3}{4}$ " Hy-Rib.....	25-28
Accessories for Hy-Rib Construction.....	29
LoRib .....	30
Diamond Mesh Lath.....	31
Walls, Partitions and Ceilings.....	32-33
Corner Beads.....	34
Cornerite, Strip-Ite and Channels.....	35
Coal Chutes and Mortar Boxes.....	36
I-Plates.....	37-38
Steel Sash.....	39-42
Continuous Sash.....	43-44
Operators.....	45
Double-Hung Windows.....	46-47
Basement Windows.....	48-49
Steel Casements.....	50-51
Steel Partitions.....	52
Steel Doors.....	53-54
Lockers.....	55-56
Standard Buildings.....	57-59
Hangars.....	60
Boxes and Platforms and Foundry Flasks.....	61
Steel Poles.....	62
Wire Mesh.....	63-64
Centre Joints.....	65-67
Curb Bars.....	68
Edge Protectors.....	69
Door Frames.....	70-71



SQUARE RIB BAR

## TRUSCON RIB BARS

THE Rib Bar for reinforcing concrete is a special rolled section of highest grade steel with a series of cross ribs so designed as to secure maximum grip on the concrete.

Rib Bars are widely used for reinforcement of concrete slabs and of flat ceiling designs, also as bent bars in beams, vertical bars in columns and for reinforcement in domes, tanks, abutments, walls and concrete subject to tension and compression and to temperature, expansion and shrinkage stresses.

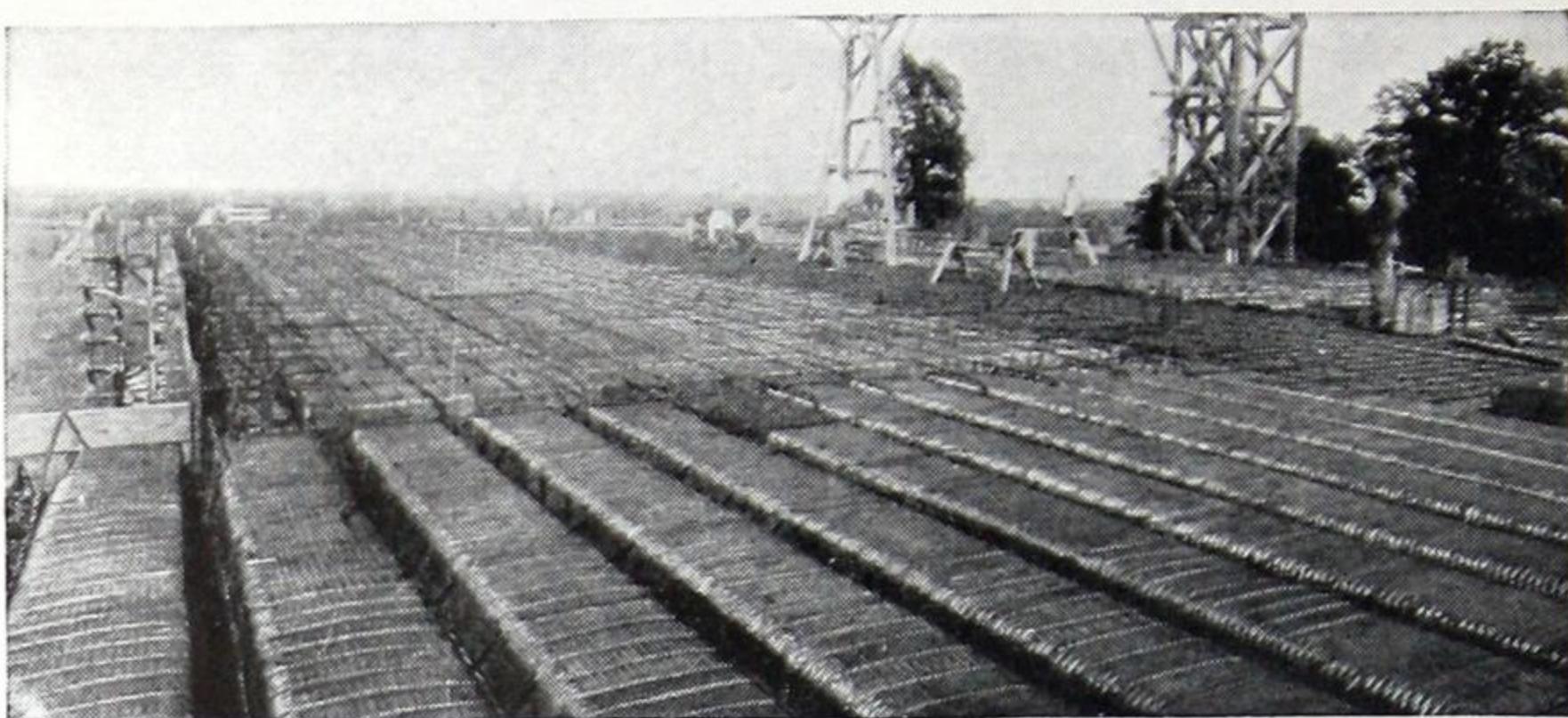
Furnished either straight or bent as ordered. Carried continually in stock.

### TABLE OF PROPERTIES OF RIB BARS

Note—Sectional areas of bars are approximately equal to square bars of same designation.

Size	Area	Weight per Lineal Foot
$\frac{3}{8}''$	.1406 sq. in.	.48 lbs.
$\frac{1}{2}''$	.2500 sq. in.	.86 lbs.
$\frac{5}{8}''$	.3906 sq. in.	1.35 lbs.
$\frac{3}{4}''$	.7656 sq. in.	1.95 lbs.
$\frac{7}{8}''$	.7625 sq. in.	2.65 lbs.
1"	1.0000 sq. in.	3.46 lbs.
$1\frac{1}{8}''$	1.2656 sq. in.	4.38 lbs.
$1\frac{1}{4}''$	1.5625 sq. in.	5.41 lbs.

Furnished either straight or bent as desired. Prompt shipments either from stock or mill.



## TRUSCON FLORETYLE CONSTRUCTION

TRUSCON Floretyle Construction consists of rows of specially formed steel floretypes separated by reinforced concrete joists and covered with a thin layer of concrete.

The floretypes act merely as fillers, eliminating the dead weight of large masses of concrete and producing a light floor of great rigidity. The light weight saves not only in the floor itself but in the supporting framework and foundations. This makes possible flat ceilings of long span without any objectionable intermediate beams. The hollow spaces in the tyle assure sound-proofness. Simple, inexpensive centering is required.

### RIBBED STEEL FLORETYLES

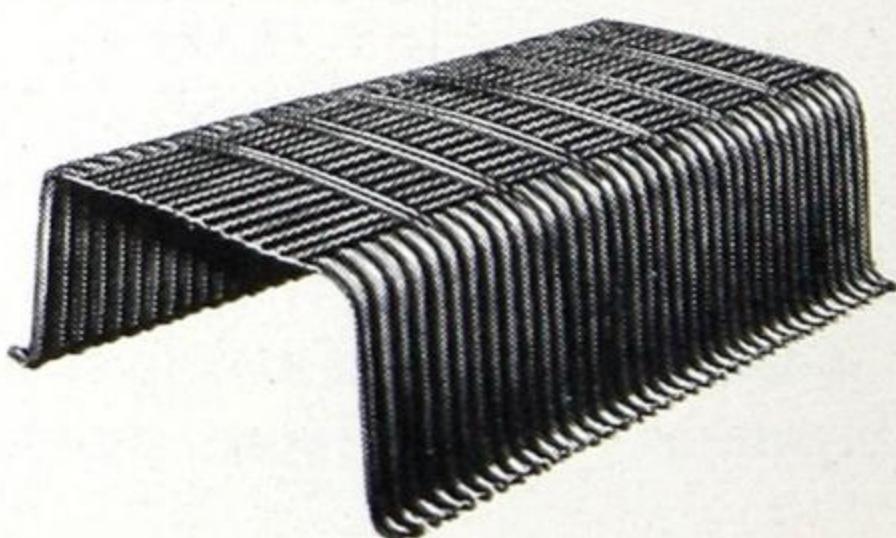
Ribbed Steel Floretyles used in this construction are manufactured in powerful presses operated with multiple dies which insure accuracy and uniformity. Across the tops, deep stiffening ribs give the floretyles exceptional rigidity. The corrugated sides, rounded corners and corrugated flanges along the bottom edge add to the stiffness and prevent deformation.

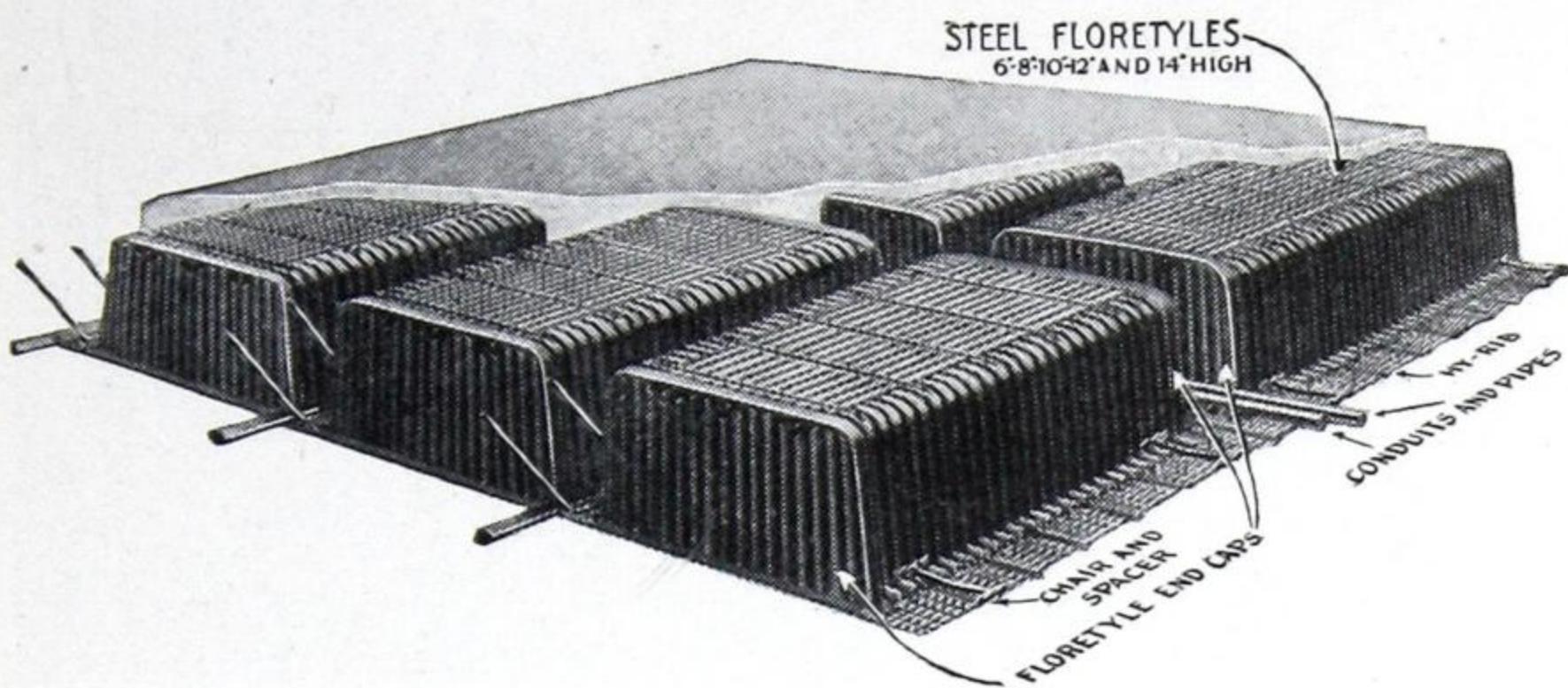
#### PROPERTIES OF RIBBED STEEL FLORETYLE

Standard Heights: 6", 8", 10", 12", and 14".

Standard Lengths: Nominal, 2' 3" and 1' 1".

Actual length is about 1" greater to provide for end lap. End caps to close the floretyle furnished in all heights, and fit snugly.



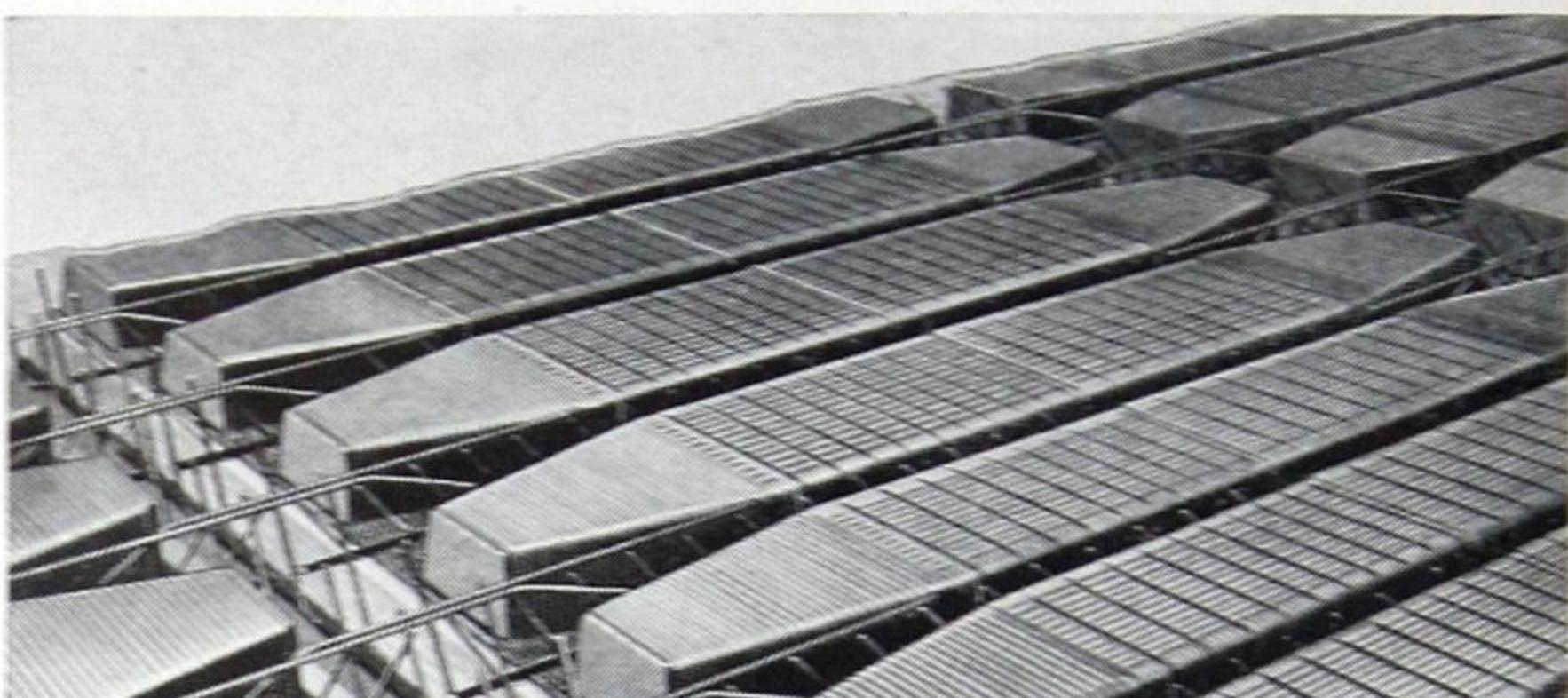


## TRUSCON FLORETYLE CONSTRUCTION WITH $\frac{3}{8}$ " HY-RIB

THE use of Truscon Ribbed Floretyle with  $\frac{3}{8}$ " Hy-Rib Ceiling Lath is the original form of Truscon Floretyle Construction and is peculiarly suited to those buildings having a large number of conduits in the floor construction. The  $\frac{3}{8}$ " Hy-Rib is shipped in bundles of sheets. These sheets are first spread over the centering, the conduits are then placed and after that the stiff removable floretyle is placed in rows on top of the Hy-Rib and conduits with the edges clipped to fit around the conduits. Or header joists are obtained by the use of extra end caps for placing conduits in concrete as shown in the sketch at the top of the page.

A Spacer Chair is placed in the joints between the ribbed floretyle and at the ends of the rows. The standard widths of spacer chairs are 4",  $4\frac{1}{2}$ " and 5". In addition to insuring proper width of concrete joist between the floretyle, these spacers serve as a chair for holding the reinforcing steel up above the Hy-Rib to obtain proper fireproofing of concrete underneath the reinforcement.

As used with  $\frac{3}{8}$ " Hy-Rib, the approximate widths of ribbed floretyle, exclusive of flanges along the bottom edges, are  $20\frac{1}{2}$ " for heights of 6" and 8", and 21" for heights of 10", 12" and 14".



## TRUSCON FLORETYLE CONSTRUCTION WITH STANDARD CANTILEVER FLORETYLES

GREATER economy in reinforced concrete design is obtained by increasing the negative bending moments and decreasing the positive bending moments. Stress—Strain studies of completed structures indicate that the work of carrying loads is very largely done by these negative moments in monolithic construction like reinforced concrete.

Truscon Cantilever Floretyles, used at the ends of the rows, provide the width of concrete joists adjacent to the supports necessary to take advantage of this more economical method of designing. Shearing stresses are also more economically handled by the increased width of concrete than by the use of loose stirrups.

Cantilever End Caps of proper size are used to close the small ends of the cantilever floretyle.

### PROPERTIES OF CANTILEVER FLORETYLES

Standard Heights—6", 8", 10", 12", and 14". Approximate widths: the wide end to fit the standard ribbed floretyle. At narrow end, any width required to meet the requirements of economical design. Lengths: Nominal 2' 3" and 1' 1". Actual lengths are 1" greater to allow for the end lap. Lengths of 3' 4" and 4' 6" can also be obtained by the use of a standard and special tyle.



## TRUSCON FLORETYLE CONSTRUCTION WITH REMOVABLE FLORETYLES

IN buildings comprised of several typical floors laid out in oblong panels, with long spans and not requiring a plastered ceiling, Truscon Floretyle construction with removable floretyles will often be found very economical.

Truscon Removable Steel Floretyles are made of 16-gauge steel, so designed as to be readily removable, extremely sturdy and very economical. The ribs across the top add to their rigidity, eliminating the necessity of excessive crowning, which is wasteful of concrete.

Truscon Removable Floretyles are furnished either with straight sides as shown or with a  $\frac{3}{8}$ " flange along the bottom edge.

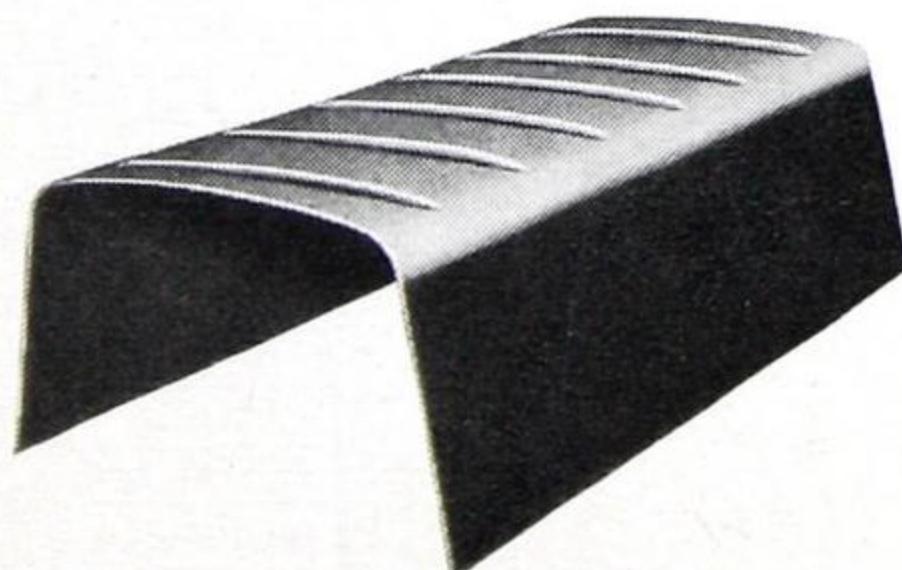
### PROPERTIES OF REMOVABLE FLORETYLES

Heights: 10" and 14".

Approximate Width at Base: 20".

Standard Lengths (nominal): 3' 0".

Actual length is 1" greater, to allow for end laps.



For other heights the 10" and 14" tyle are dropped down to give the required height.

End tyles to close rows of Floretyles are furnished 14" high.

SAFE LIVE LOADS IN LBS. PER SQ. FT. ON  
FLORETYLE CONSTRUCTION

6" FLORETYLE + 2" CONCRETE

	Span in Feet	As = .41"	As = .52"	As = .66"	As = .79"	As = 1.04"	As = 1.23"	As = 1.39"
8	264	342						
9	200	260	335					
10	152	202	262	330				
11	118	158	208	264				
12	91	126	167	215	288			
13	71	101	136	176	239			
14	55	80	110	145	200	235		
15	42	64	90	120	168	201	225	
16	31	50	73	100	142	171	192	
17		38	60	83	120	146	165	
18		29	48	69	102	125	142	
19			39	57	87	108	123	
20			30	47	74	93	106	
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

Weight of Floor in Lbs. per Sq. Ft., 47.  
Center to Center of Joists, 24  $\frac{1}{2}$ ."

SAFE LIVE LOADS IN LBS. PER SQ. FT. ON  
FLORETYLE CONSTRUCTION

8" FLORETYLE + 2" CONCRETE

	Span in Feet							
	As = .41"		As = .52"		As = .66"			
	8	9	10	11	12	13		
8	346	442						
9	262	341	438					
10	202	266	345	430				
11	158	211	276	347				
12	124	169	223	282				
13	98	136	183	233	317			
14	77	110	150	193	266			
15	61	89	124	161	225	269		
16	47	72	103	136	192	230	263	
17	35	58	84	113	163	198	227	234
18	26	46	70	96	140	171	197	203
19	18	35	57	81	120	148	171	177
20		27	47	68	103	128	150	154
21		20	37	57	89	112	131	135
22			30	47	77	97	115	118
23			23	39	64	84	100	104
24				31	56	73	88	91
25				25	47	63	77	80
26								
27								
28								
29								
30								

Weight of Floor in Lbs. per Sq. Ft., 53.  
Center to Center of Joists, 24 1/2."

SAFE LIVE LOADS IN LBS. PER SQ. FT. ON  
FLORETYLE CONSTRUCTION

10" FLORETYLE + 2" CONCRETE

Span in Feet	AS = .41"	AS = .52"	AS = .66"	AS = .79"	AS = 1.04"	AS = 1.23"	AS = 1.39"	AS = 1.41"	AS = 1.66"	AS = 1.85"
8	418									
9	318	412								
10	246	323	420							
11	194	257	338	420						
12	153	207	274	342						
13	122	168	226	285						
14	97	137	186	238	320					
15	77	112	154	199	271	331				
16	64	91	129	168	231	284	333			
17	47	74	108	142	198	245	281	288		
18	36	60	90	121	170	212	244	250		
19		48	74	102	147	184	213	219	264	
20		37	62	87	127	161	187	192	233	258
21		29	50	73	110	140	164	169	205	228
22			41	62	95	123	144	149	182	203
23			33	52	82	107	127	131	162	181
24				42	70	94	112	115	144	161
25				35	60	82	90	102	128	144
26				28	51	72	87	90	114	129
27					44	62	76	79	102	115
28					36	54	67	69	90	103
29						46	59	61	81	92
30						39	51	53	71	82

Weight of Floor in Lbs. per Sq. Ft., 58.  
Center to Center of Joists, 25".

SAFE LIVE LOADS IN LBS. PER SQ. FT. ON  
FLORETYLE CONSTRUCTION

12" FLORETYLE + 2" CONCRETE

	Span in Feet							
	AS = .41"		AS = .52"		AS = .66"		AS = .79"	
	AS = 1.04"	AS = 1.23"	AS = 1.39"	AS = 1.41"	AS = 1.66"	AS = 1.85"	AS = 2.01"	
8	497							
9	379							
10	295	387						
11	233	309						
12	185	249	329	411				
13	149	203	271	341				
14	120	167	225	285				
15	96	137	189	241	331			
16	77	113	158	204	284			
17	61	93	133	173	244	295	347	
18	47	76	112	148	211	257	295	303
19	36	62	94	126	183	224	257	266
20	27	49	78	108	159	196	224	234
21		39	65	92	138	172	200	206
22		30	54	78	121	151	176	183
23			44	66	105	133	157	162
24				35	55	91	117	139
25				28	46	79	103	123
26					38	69	90	109
27						59	79	97
28						50	69	86
29						43	60	75
30						36	52	66

Weight of Floor in Lbs. per Sq. Ft., 63.  
Center to Center of Joists, 25".

SAFE LIVE LOADS IN LBS. PER SQ. FT. ON  
FLORETYLE CONSTRUCTION

12" FLORETYLE + 3" CONCRETE

Span in Foot	AS = .41"	AS = .52"	AS = .66"	AS = .79"	AS = 1.04"	AS = 1.23"	AS = 1.39"	AS = 1.41"	AS = 1.66"	AS = 1.85"	AS = 2.01"
8	528										
9	401										
10	311	410									
11	243	326									
12	193	262	350	437							
13	153	212	287	361							
14	122	172	238	301							
15	96	140	197	253	350						
16	76	115	165	213	299						
17	58	93	137	180	257	310					
18	44	75	114	153	221	270	320				
19	32	60	95	130	190	235	271	280			
20	22	46	78	110	164	205	239	246			
21		35	64	92	142	179	208	216	264		
22		25	52	78	123	156	184	190	235	264	
23		17	41	65	106	136	162	168	210	236	
24			31	53	91	119	143	148	185	210	232
25				23	43	78	104	126	130	166	188
26					34	67	90	111	115	148	168
27						27	57	78	97	100	132
28							19	47	68	85	117
29								39	58	75	103
30									32	50	65

Weight of Floor in Lbs. per Sq. Ft., 75.  
Center to Center of Joists, 25".

## EXPLANATION OF FLORETYLE TABLES

TABLES covering safe live loads in lbs. per sq. ft. on Floretyle construction give the safe live loads which can be placed on the construction when spans are continuous at both ends.

The dead weight of the construction has been provided for, but any finished flooring placed on it must be considered as part of the live load.

Deduct weight of floor finish from loads in table to obtain net safe live load.

A plastered ceiling is included in the dead load, so if ceiling is omitted, loads in tables can be increased by 8 lbs. per sq. ft.

**BASIS OF TABLES:** Bending Moment =  $\frac{1}{12} wl^2$ .

The loads in tables should be used only where spans are continuous at both ends.

For safe loads on simple spans use:

$$W = \frac{8}{12} (w + \text{wt. of floor}) - \text{wt. of floor.}$$

For safe loads on spans continuous at one end, use:

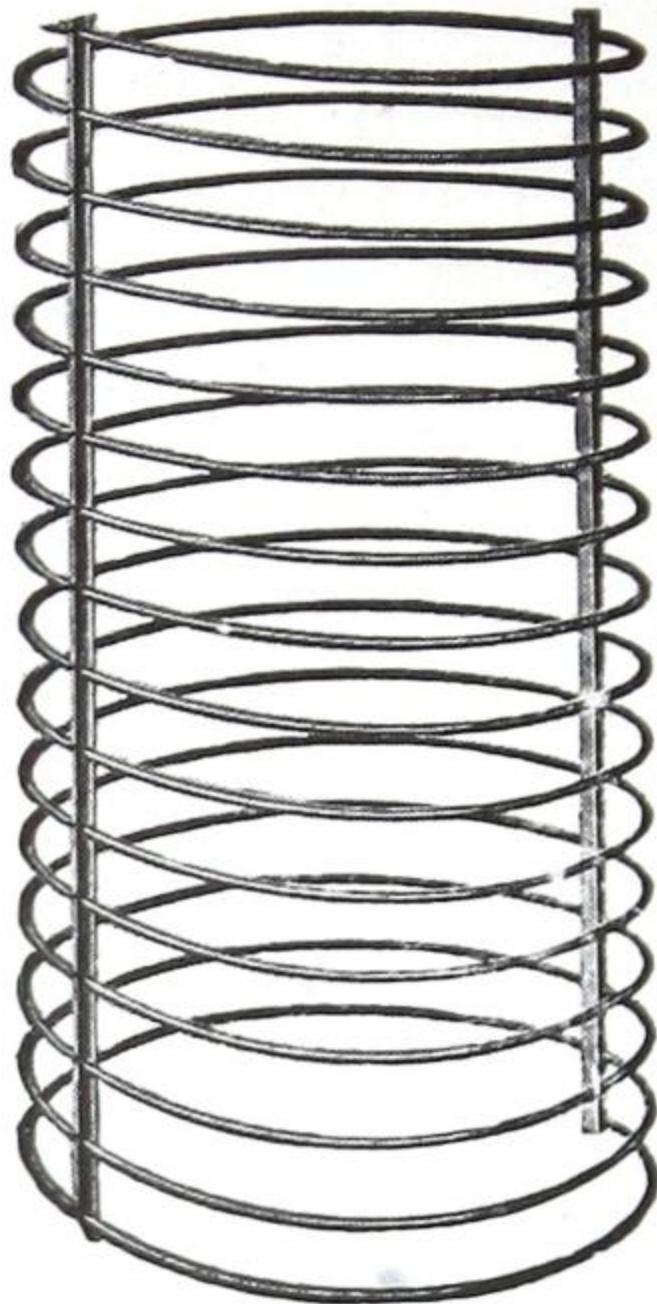
$$W = \frac{10}{12} (w + \text{wt. of floor}) - \text{wt. of floor.}$$

Where  $w$  = load given in table.

The steel shown is to be placed in the bottom of the joist, part of which may be bent up for shear. Stirrups may be required in addition to this. To provide for the negative moment in spans continuous at one or both ends place in the top of the slab over the supports an additional area of steel equal to at least  $\frac{1}{2}$  that shown in the table. For anchorage for simple spans place in the top of the slab at the support  $\frac{1}{4}$  as much steel as shown in the table.

The load tables are based on joists 4" wide. Where this width is insufficient to take care of the negative moment required by the code under which the construction is being designed, use cantilever end tyle.

## COLLAPSIBLE COLUMN HOOPING



COLLAPSIBLE Column Hooping, for reinforcing concrete columns, is shipped in the form of flat, circular coils of exact diameter and accurately spaced by means of special spacing bars. These coils spring automatically into a complete hooped column on cutting the small fastening wires.

Rib Bars are ordinarily used as vertical reinforcement in conjunction with Column Hooping.

### SIZES OF COLLAPSIBLE COLUMN HOOPING

Shipped complete with two, three or four spacing bars as required.

Sizes of wire for hooping:  $\frac{1}{4}$ ",  $\frac{5}{16}$ ",  $\frac{3}{8}$ ",  $\frac{7}{16}$ " and  $\frac{1}{2}$ " diameter.

Diameters of Coils: 9-inch to 48-inch.

Pitch:  $1\frac{1}{2}$ -inch to 12 inches.

Hooping, where desired, can also be furnished in bundles, coiled to the correct diameter, and with separate spacing bars, ready for assembling in the field.



## TRUSCON O-T (OPEN TRUSS) STEEL JOISTS

### FOR ECONOMICAL AND FIREPROOF FLOORS

THE superiority of steel joist construction for economical and fireproof floors is especially well exemplified in Truscon O-T (Open Truss) Steel Joists. Their design is based on the best engineering practice and includes many distinctive features.

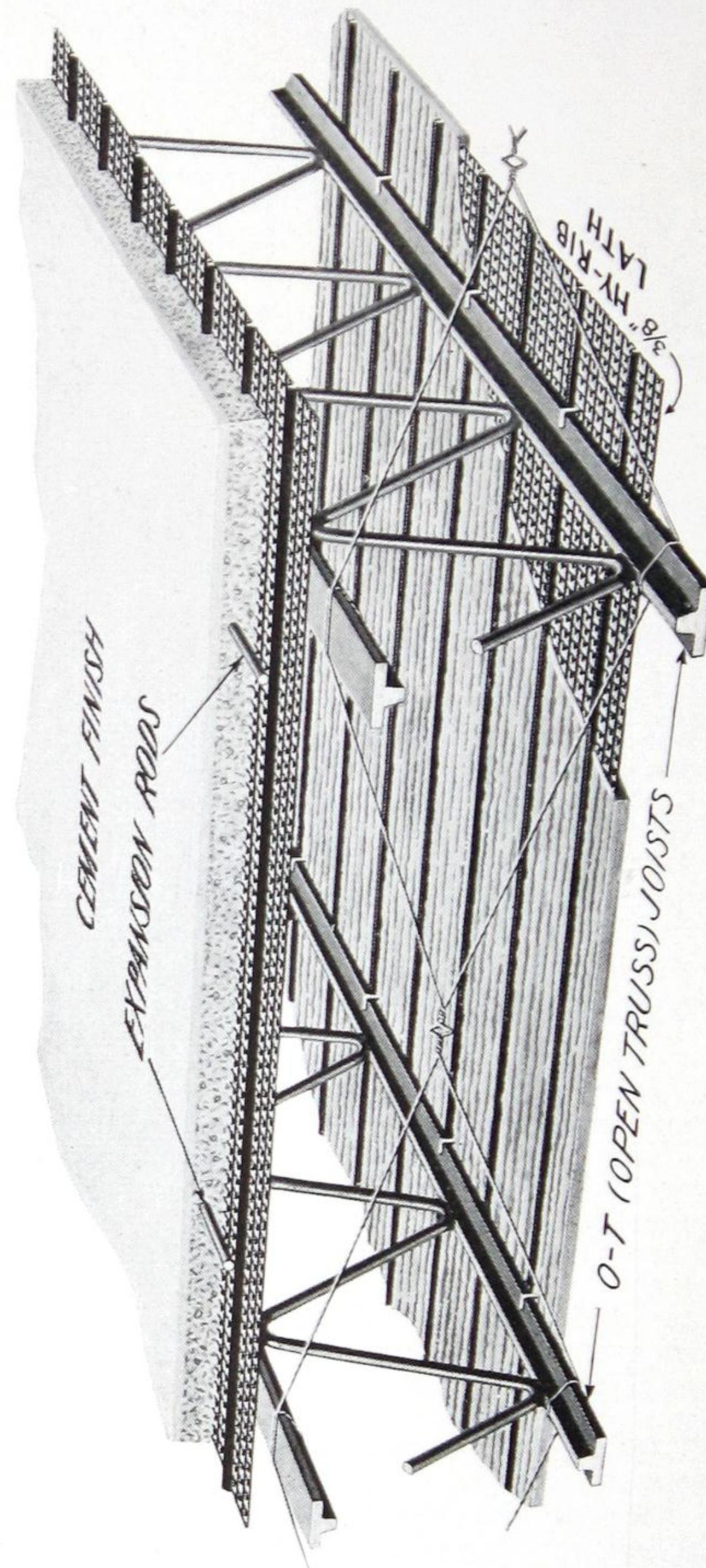
The top and bottom chords of the Warren truss are wide "tee-shaped" members providing the greatest resistance to buckling strains. The bottom "tee" is continuous to the bearings, where it is welded with web plate and top chord to form a solid I-Beam. The web members are continuous from end to end to positively transmit the stresses. The welding of all joints is done under a method of high pressure electric welding making the most positive connections.

The entire design is not only unusually efficient but is exceptionally economical of materials. Truscon O-T (Open Truss) Steel Joists are manufactured of the highest grade open hearth steel in accordance with Truscon standards of quality workmanship.

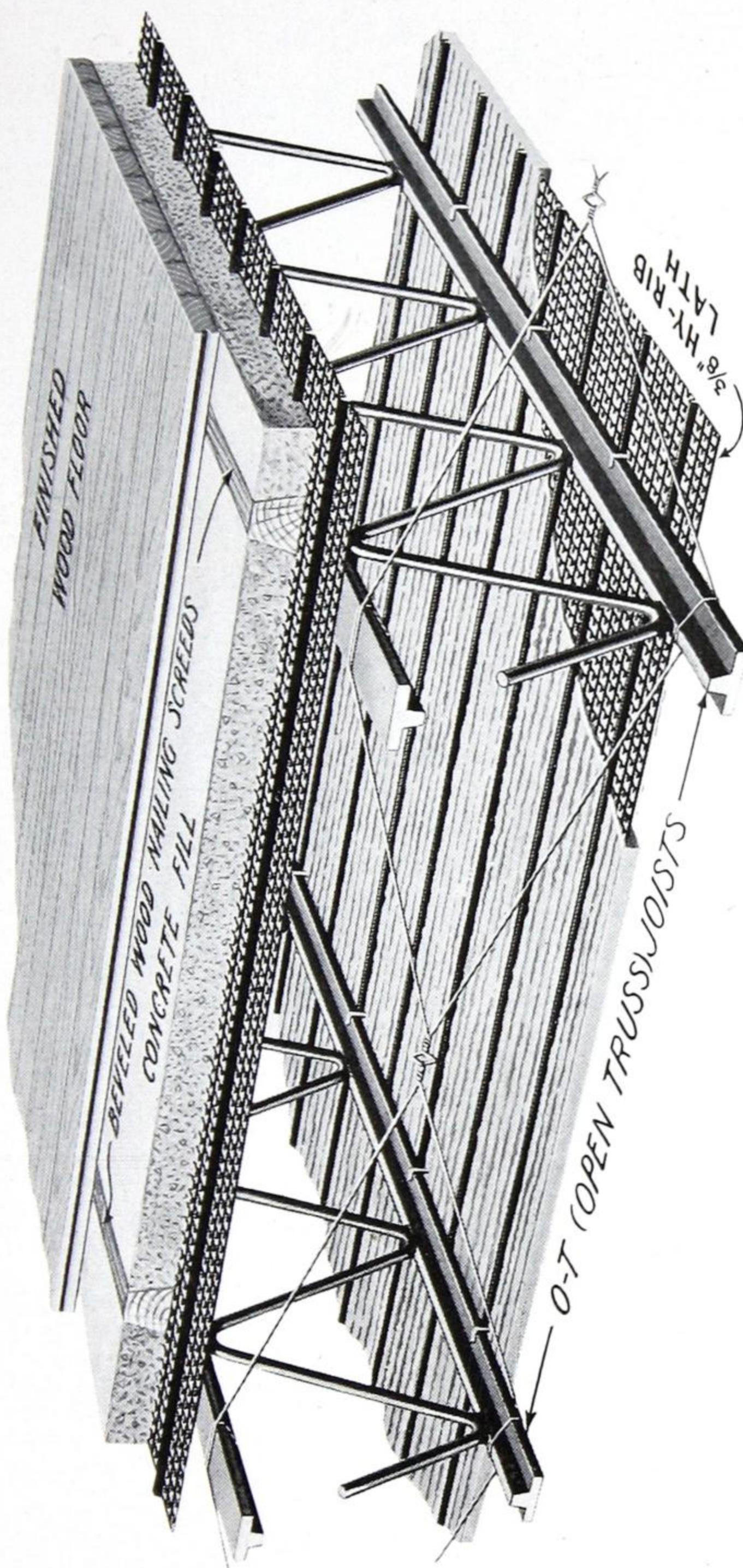
In practical use Truscon O-T (Open Truss) Steel Joists are extremely simple to install, insuring utmost speed of erection. The underslung design of the bearing permits maximum head-room under the supporting girders. The open web allows the passage of pipes and conduits of any number and in any direction.

Truscon O-T (Open Truss) Steel Joists are completely shop fabricated and reach the job ready for placing. Each Joist is marked to correspond with the erection diagram, thus greatly simplifying and speeding construction work.

Thorough tests under extreme loadings have demonstrated their all-around dependability.



TRUSCON O-T (OPEN TRUSS) STEEL JOIST CONSTRUCTION WITH CEMENT  
FLOOR FINISH  
 $\frac{3}{8}$ " HY-RIB LATH FOR FLOOR AND CEILING



TRUSCON O-T (OPEN TRUSS) STEEL JOIST CONSTRUCTION WITH WOOD FLOOR FINISH

$\frac{3}{8}$ " HY-RIB LATH FOR FLOOR AND CEILING

# TOTAL SAFE LOADS UNIFORMLY DISTRIBUTED

DESIGNED IN ACCORDANCE WITH TRUSCON STEEL CO.  
STANDARDS USING MAXIMUM STRESS OF  
16000 LBS. PER SQ. IN.



## TRUSCON P-G (PLATE GIRDER) STEEL JOISTS

THE Truscon P-G (Plate Girder) Steel Joist, as its name implies, is a substantial structural steel unit, comparable in design and construction with the plate girders of bridges and buildings.

The flanges are made up of steel angles which are welded to the steel web to form a plate girder of enduring strength. The welding is by the high pressure electric system, assuring the perfect union of all parts.

Truscon P-G (Plate Girder) Steel Joists are furnished in depths ranging from 4" to 12", which enables the architect or engineer to meet his particular conditions with the most efficient design.

Truscon Steel Joists are fabricated complete at the factory and reach the job ready for erection. Each joist is clearly marked to correspond with the placing diagram, thus greatly simplifying and speeding up construction.

## TRUSCON ACCESSORIES FOR REINFORCED CONCRETE CONSTRUCTION



### TRUSCON STEEL HIGH CHAIRS

USED particularly for accurately locating the top reinforcing bars over columns in the flat slab construction. Can be used to support each bar individually or to carry a supporting bar for a group of bars. The two lips in top are bent over to hold the bars rigidly. The bottom lugs are punched with holes to nail chair to forms. Truscon Steel Chairs eliminate time and labor of wiring the steel in place.

### BAR SPACERS AND CHAIRS

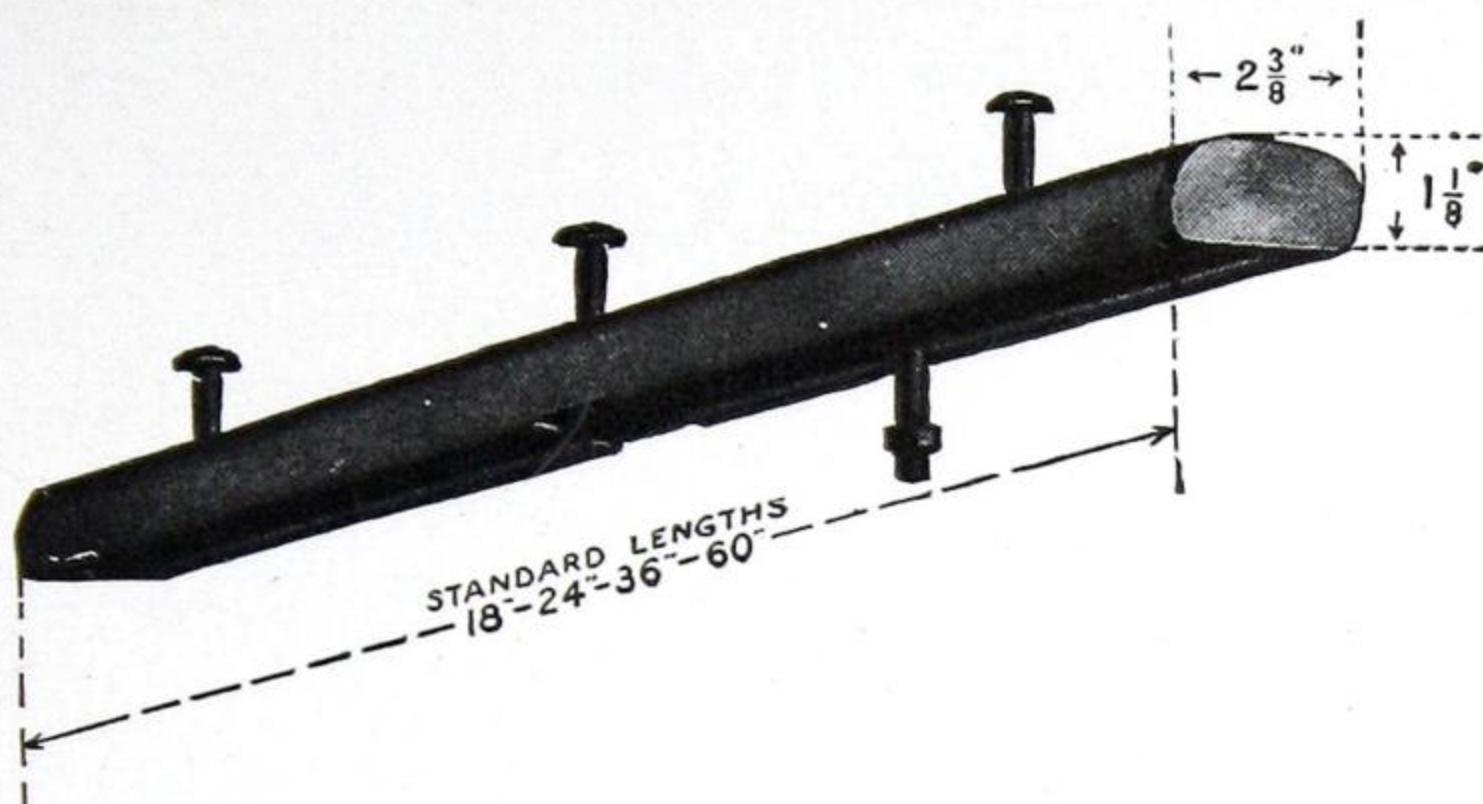
Lower Slab Bar Spacer: For supporting and spacing bars in slabs the proper distance from the forms, Furnished in heights to support the steel  $\frac{1}{2}$ ",  $\frac{3}{4}$ ", 1",  $1\frac{1}{4}$ " and  $1\frac{1}{2}$ " above the forms.

Upper Slab Bar Spacer: Furnished for rods resting on a lower layer of rods and for top bars.

Beam Bar Spacer: Made in two heights, to support the steel  $1\frac{1}{2}$ " or 2" above the form.

Joist Spacer: For tile and concrete joist construction for 4" and 5" joists. Furnished in  $\frac{1}{2}$ ",  $\frac{3}{4}$ ", 1" and  $1\frac{1}{2}$ " heights.

## TRUSCON PRESSED STEEL INSERTS



### TRUSCON SLOTTED INSERTS

TRUSCON Slotted Inserts are used in concrete slabs, beams or columns for attaching Shaft Hangers, Fixtures, Sprinkler Systems, etc. They do away with expensive drilling into concrete after completion of the building.

Truscon Slotted Inserts are built into the concrete during the process of construction by merely fastening them to the wood centering. The concrete thoroughly imbeds the insert and holds it rigidly in place. Only the narrow slot flush with the concrete is seen in the completed work. The bolt can be moved along this slot to any desired location allowing a wide variation in position.

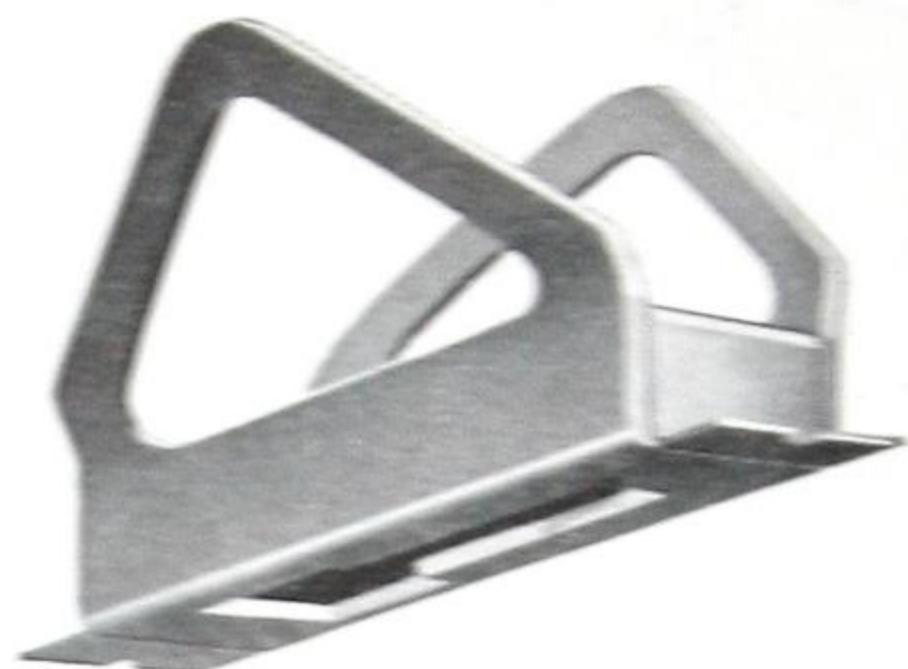
Two special washers are furnished with each Truscon Pressed Steel Slotted Insert. These square washers fit into the slot, and prevent the head of the shaft hanger bolt from turning.

Standard lengths: 18 in., 24 in., and 36 in.

A continuous Insert of any desired length can be obtained by removing the end caps and butting the inserts end to end.

Inserts are adapted for  $\frac{1}{2}$ ",  $\frac{5}{8}$ " or  $\frac{3}{4}$ " bolts. Where  $\frac{1}{2}$ " or  $\frac{5}{8}$ " bolts are used, two special washers are furnished for each insert to prevent bolt from turning after being inserted in the slot.

### TRUSCON ADJUSTABLE INSERTS



ARE made of pressed steel, and have the same simple method of application to concrete and adjustment for bolts as the slotted inserts, but without their wide range of adjustability. Made to carry  $\frac{1}{2}$ ",  $\frac{5}{8}$ " and  $\frac{3}{4}$ " bolts.

### TRUSCON SOCKET INSERTS



ARE used in concrete slabs, beams and columns for attaching shafts, hangers, sprinkler systems, etc., and are incorporated into the concrete while under construction by securely nailing them to the wood forms, doing away with extensive drilling into the concrete after the building is complete.

They are made of iron in three sizes, properly cored and tapped to receive  $\frac{1}{2}$ ",  $\frac{5}{8}$ " and  $\frac{3}{4}$ " bolts.



## TRUSCON $\frac{3}{8}$ " HY-RIB

TRUSCON  $\frac{3}{8}$ " HY-RIB LATH is a self-furring lath. It is generally preferred because it permits wide spacing of studs, and saves channels and wiring. Used for stucco and plaster work on ceilings, straight-away partition work with channels, in sidings, as furring.

$\frac{3}{8}$ " HY-RIB lath is manufactured from a single plate of steel. Deep stiffening ribs run full length of the sheet, with distance between ribs spanned by rows of ingenious "keys." In erecting, ribs should be against the supports so as to fur out the face of the lath and permit plaster to penetrate through mesh.

For exterior stucco it provides a rigid base that can be used over sheathing or for back plastered construction.  $\frac{3}{8}$ " HY-RIB is also popular for use as a reinforcing for concrete slabs over steel joists.

### PROPERTIES OF $\frac{3}{8}$ " HY-RIB LATH

Weight Sq. Yd. Lbs.	Height Ribs Inches	Spacing Ribs Inches	Stud Spac. for Walls and Part. Inches	Spac. Supports for Ceilings Inches
2.5	$\frac{3}{8}$	4	to 19	to 16
3.0	$\frac{3}{8}$	4	19 to 24	16 to 20
3.5	$\frac{3}{8}$	4	24 to 30	16 to 24
4.0	$\frac{3}{8}$	4	32 to 36	24 to 32

Furnished painted.

PROPERTIES OF  $\frac{3}{8}$ " HY-RIB LATH (Cont.)

Length Sheet	Width Sheet	Sq. Yds. Sheet	Sheets Bundle	Sq. Yds. Bundle
8'	24"	1 $\frac{7}{9}$	10	17 $\frac{7}{9}$
10'	24"	2 $\frac{2}{9}$	10	22 $\frac{2}{9}$
12'	24"	2 $\frac{2}{3}$	10*	26 $\frac{2}{3}$

\*4 lb.  $\frac{3}{8}$ " Hy-Rib in Bundles of 8 sheets or 21 $\frac{2}{3}$  Sq. Yds. per bundle.

TOTAL SAFE LOADS, CONCRETE SLABS,  $\frac{3}{8}$ " HY-RIB

Slab Thick- ness Inches	4.0 Lb., $\frac{3}{8}$ " Hy-Rib Area of Steel per Foot of Width Square Inches	Span of Slab Center to Center							
		12 Inches		16 Inches		19 Inches		24 Inches	
		W	P	W	P	W	P	W	P
2	.0712	1233	617	688	458	479	379	291	291
2 $\frac{1}{2}$	.0712	1560	780	870	580	607	480	370	370
3	.0712	1890	945	1055	703	735	582	447	447

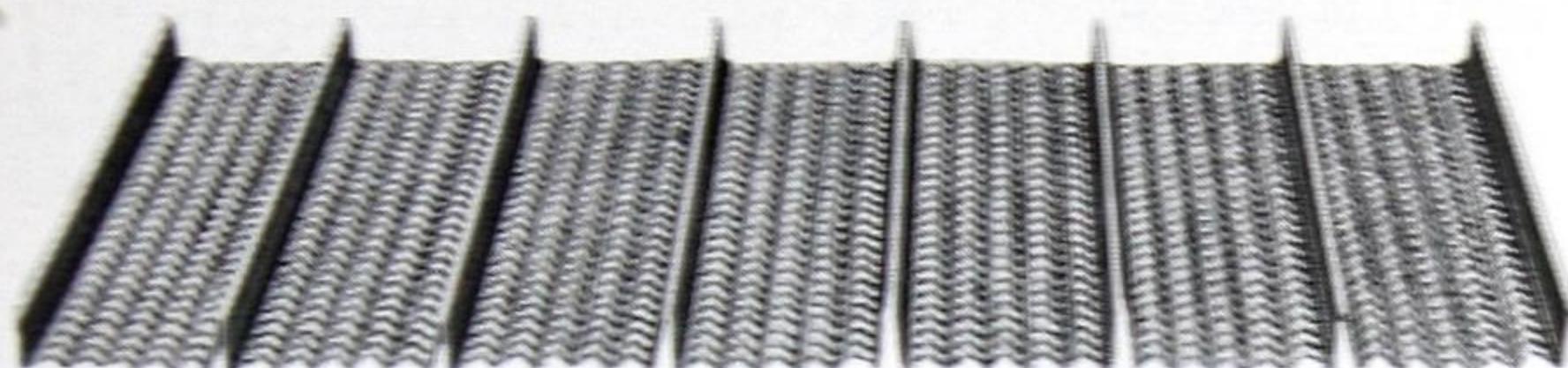
Concrete in compression not over 550 pounds per square inch. Steel in tension, 16,000 pounds per square inch. Unit shear not over 50 pounds per square inch.

W—Live load per square foot, uniformly distributed.

P—Concentrated load per foot of width.

PROPERTIES OF  $\frac{3}{8}$ " HY-RIB LATH

Weight per Square Yard of $\frac{3}{8}$ Inch Hy-Rib Lath Pounds	Area of Steel Per Foot of Width Square Inches	For Carrying Capacity Multiply Above Loads by	Strength as Centering Joist Spacing Inches
2.5	.0417	.58	12 to 16
3.0	.0522	.73	12 to 16
3.5	.0610	.85	12 to 19
4.0	.0712	1.00	12 to 24



## TRUSCON $\frac{3}{4}$ " HY-RIB

TRUSCON  $\frac{3}{4}$ " Hy-Rib is a concrete reinforcement for floors, roofs, tanks and arches that saves forming.

For arched floors, balconies and other construction, where elaborate and expensive wood forming is usually required,  $\frac{3}{4}$ " Hy-Rib can be substituted with a big saving in material and labor.

The heavy reinforcing ribs spaced 4" apart make it possible to have supports as much as 11 feet apart. Hy-Rib sheets can be furnished curved to practically any radius, or they may be bent in the field with a hand bending machine. On large jobs, contractors will find it more economical to use this machine and have the Hy-Rib shipped in flat sheets.

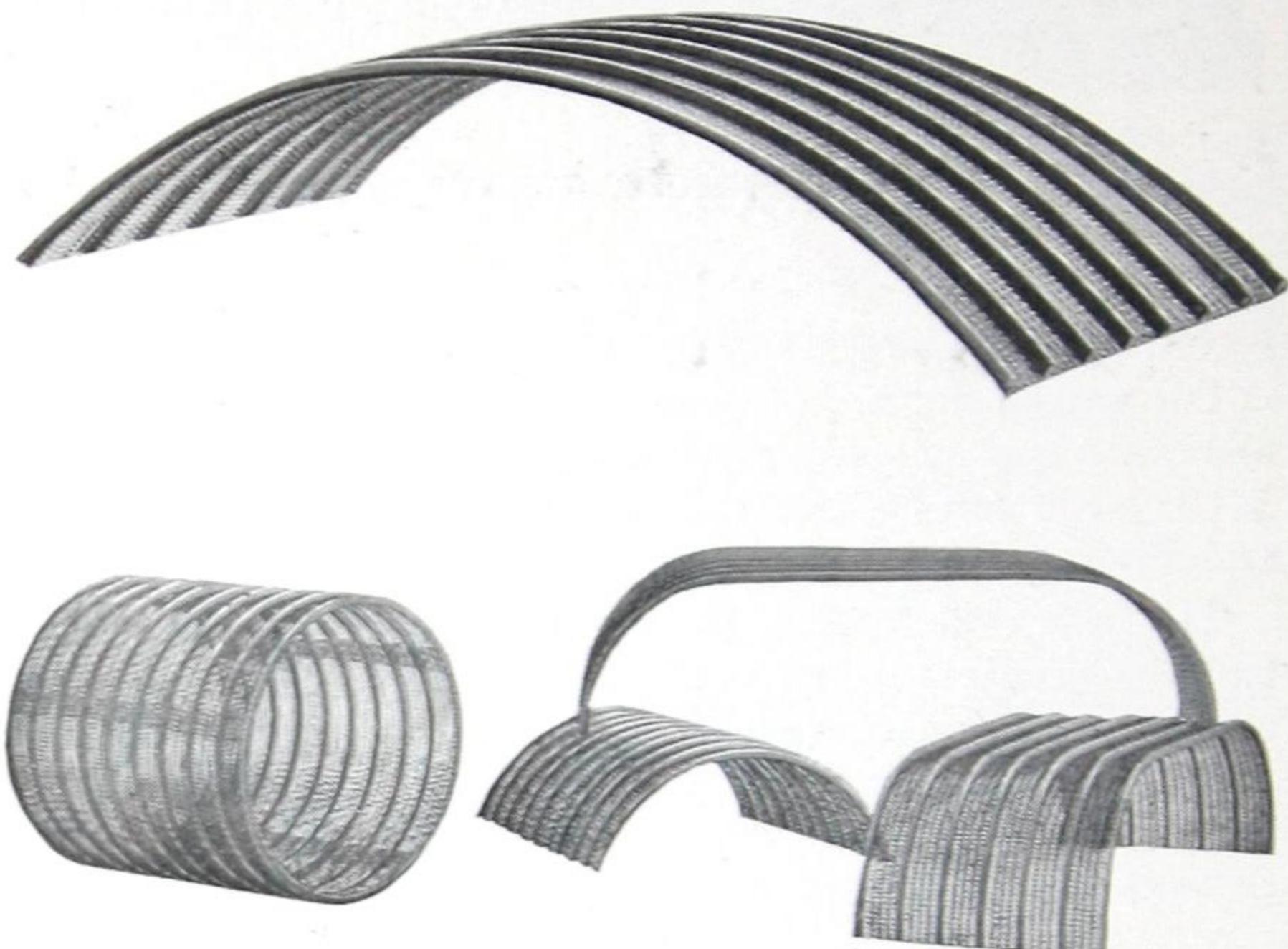
### PROPERTIES OF $\frac{3}{4}$ " HY-RIB

Weight Per Sq. Foot Lbs.	Height of Ribs	Spacing of Ribs	No. Ribs Per Sheet	Width of Sheet	Cross Sectional Area per Foot Width
.48	$\frac{3}{4}$ "	4" C to C	8	28"	.0961 sq. in.
.58	$\frac{3}{4}$ "	4" C to C	8	28"	.1172 sq. in.
.68	$\frac{3}{4}$ "	4" C to C	8	28"	.1407 sq. in.
.78	$\frac{3}{4}$ "	4" C to C	8	28"	.1642 sq. in.

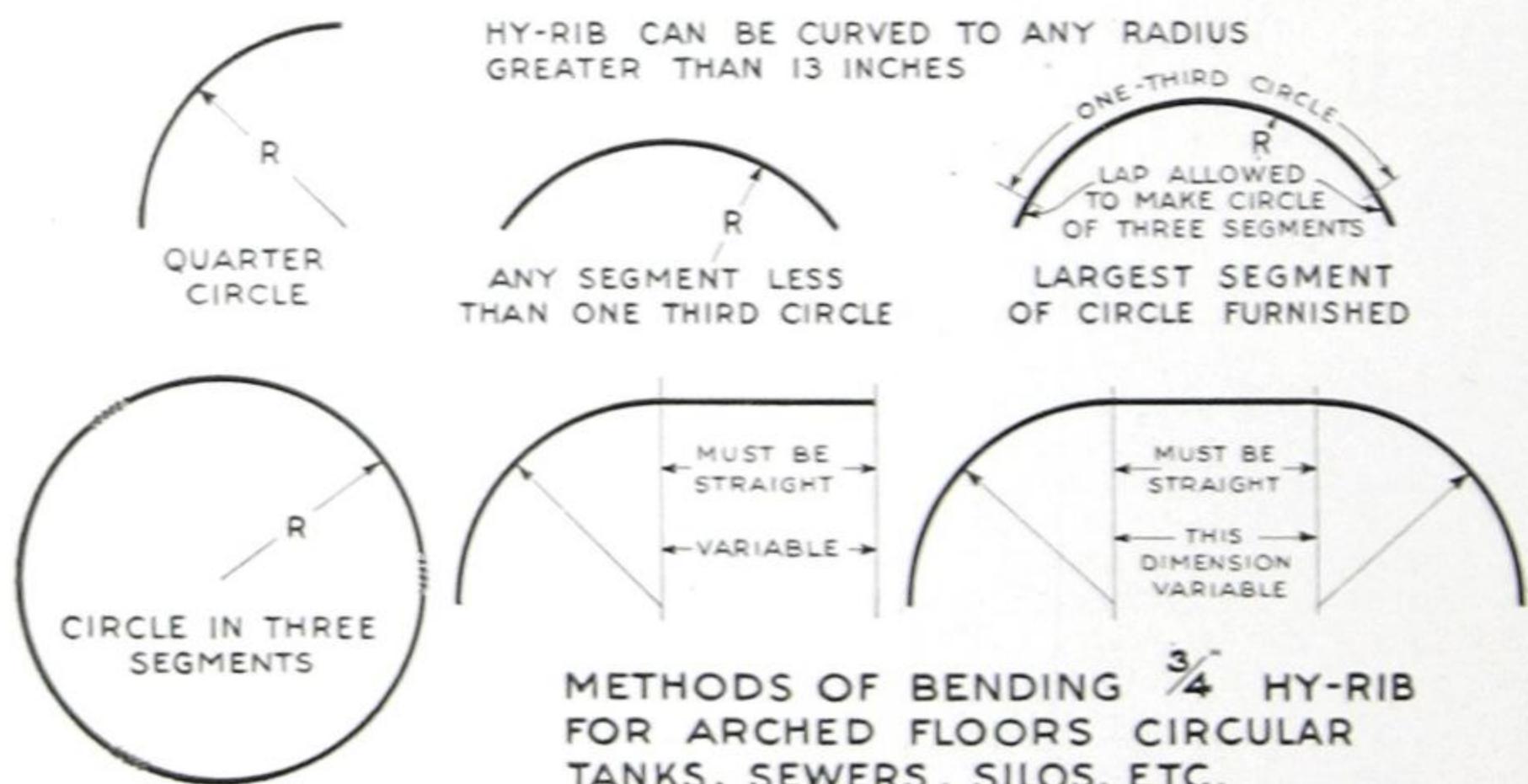
Furnished painted.

Length Sheet	Width Sheet	Sq. Feet Sheet	Sheets Bundle	Sq. Feet Bundle
8'	28"	18 $\frac{2}{3}$	4	74 $\frac{2}{3}$
10'	28"	23 $\frac{1}{3}$	4	93 $\frac{1}{3}$
12'	28"	28	4	112

TRUSCON  $\frac{3}{4}$ " HY-RIB METAL LATH  
BENT FOR CONCRETE FORM WORK



HY-RIB BENT TO CURVE IN OUR SHOPS



METHOD OF BENDING  $\frac{3}{4}$ " HY-RIB

### $\frac{3}{4}$ " HY-RIB SLAB TABLES

THE tables on this page are computed for floor and roof slabs in which Hy-Rib Lath is not back plastered and no temperature steel is provided.

Where roof or floor slab is exposed directly to the weather, that is, without any prepared roofing finish,  $\frac{7}{32}$ -inch pencil rods should be placed 18 inches on centers on top of lath ribs and at right angles to them. It is strongly recommended that all roof slabs and under side of all floor slabs that are exposed, shall be back plastered.

### PURLIN SIZES FOR VARIOUS SPACINGS AND SLAB THICKNESSES

Loads:—12.5 lbs. per sq. ft. per inch thickness.

Roofing:—3.0 lbs. per sq. ft. Live load 30 lbs. per sq. ft.

Purlin	Truss Spacing	12'-0"			14'-0"			16'-0"		
Spacing	Slab Thickness	2"	2 $\frac{1}{2}$ "	3"	2"	2 $\frac{1}{2}$ "	3"	2"	2 $\frac{1}{2}$ "	3"
4'-0"	Size of Channel	6	6	6	6	7	7	7	8	8
4'-6"	Size of Channel	6	6	6	7	7	7	8	8	8
5'-0"	Size of Channel	6	6	7	7	7	8	8	8	9
5'-6"	Size of Channel	6	7	7	7	8	8	8	9	9
6'-0"	Size of Channel	7	7	7	8	8	8	9	9	9
6'-6"	Size of Channel	7	8	-----	8	9	9	-----	9	10
7'-0"	Size of Channel	7	8	-----	9	9	9	-----	10	10
7'-6"	Size of Channel	8	8	-----	9	9	9	-----	10	10
8'-0"	Size of Channel	8	8	-----	9	9	9	-----	10	10
Purlin	Truss Spacing	18'-0"			20'-0"			22'-0"		
Spacing	Slab Thickness	2"	2 $\frac{1}{2}$ "	3"	2"	2 $\frac{1}{2}$ "	3"	2"	2 $\frac{1}{2}$ "	3"
4'-0"	Size of Channel	8	8	9	9	9	9	9	10	10
4'-6"	Size of Channel	8	9	9	9	10	10	10	10	12
5'-0"	Size of Channel	9	9	9	10	10	10	10	12	12
5'-6"	Size of Channel	9	10	10	10	10	12	12	12	12
6'-0"	Size of Channel	9	10	10	10	12	12	12	12	12
6'-6"	Size of Channel	10	12	-----	12	12	-----	12	12	12
7'-0"	Size of Channel	10	12	-----	12	12	-----	12	*12	*12
7'-6"	Size of Channel	12	12	-----	12	12	-----	12	*12	*12
8'-0"	Size of Channel	12	12	-----	12	12	-----	*12	*12	†12
Purlin	Truss Spacing	24'-0"			26'-0"					
Spacing	Slab Thickness	2"	2 $\frac{1}{2}$ "	3"	2"	2 $\frac{1}{2}$ "	3"	2"	2 $\frac{1}{2}$ "	3"
4'-0"	Size of Channel	10	12	12	12	12	12	12	12	12
4'-6"	Size of Channel	12	12	12	12	12	12	12	12	12
5'-0"	Size of Channel	12	12	12	12	12	12	12	12	*12
5'-6"	Size of Channel	12	12	12	12	12	12	*12	*12	†12
6'-0"	Size of Channel	12	12	*12	12	12	†12	12	12	†12
6'-6"	Size of Channel	-----	*12	†12	-----	-----	†12	12	12	15
7'-0"	Size of Channel	-----	*12	†12	-----	-----	15	15	15	15
7'-6"	Size of Channel	-----	†12	15	-----	-----	15	15	15	15
8'-0"	Size of Channel	-----	15	15	-----	-----	15	15	15	15

Weight of channels per lin. ft.:—6'-8.2 lbs.; 7'-9.81 lbs.; 8'-11.5 lbs.; 9'-13.4 lbs.; 10'-15.3 lbs.; 12'-20.7 lbs.; \*12'-25 lbs.; †12'-30 lbs.; 15'-33.9 lbs.

## SAFE LOADS FOR $\frac{3}{4}$ " HY-RIB SLABS

Safe Loads include Weight of Slab. For Safe Live Load Deduct Weight of Slab.

Thickness of Slabs above Base of Hy-Rib	Weight Per Sq. Ft. $\frac{3}{4}$ " Hy-Rib	Moment of Resistance Per Ft. of Width	SPAN IN FEET								
			3	4	5	6	7	8	9	10	11
2" thick slab Wgt. = 24 lbs. per sq. ft.	.58	3440	318	179	115	80	-----	-----	-----	-----	-----
	.68	3940	365	205	131	91	-----	-----	-----	-----	-----
	.78	4160	385	216	138	96	-----	-----	-----	-----	-----
2 $\frac{1}{2}$ " thick slab Wgt. = 30 lbs. per sq. ft.	.58	4530	420	236	151	105	77	59	-----	-----	-----
	.68	5380	498	280	179	125	91	70	-----	-----	-----
	.78	6230	577	325	208	144	106	81	-----	-----	-----
3" thick slab Wgt. = 30 lbs. per sq. ft.	.58	5630	522	293	188	131	96	73	-----	-----	-----
	.68	6710	622	349	224	155	114	87	69	-----	-----
	.78	7780	720	405	259	180	132	101	80	-----	-----
3 $\frac{1}{2}$ " thick slab Wgt. = 42 lbs. per sq. ft.	.58	6750	625	352	225	156	115	88	-----	-----	-----
	.68	8020	743	418	268	186	136	104	83	-----	-----
	.78	9300	862	484	310	215	158	121	96	78	-----
4" thick slab Wgt. = 48 lbs. per sq. ft.	.58	7850	727	409	262	182	134	102	81	-----	-----
	.68	9350	866	487	312	216	159	122	96	78	-----
	.78	10870	1060	566	362	252	185	142	112	91	75

B. M. =  $1/10WL^2$  For B. M. =  $1/12WL^2$ , add 20% to above loads.  
For B. M. =  $1/8WL^2$ , deduct 20% from above loads.

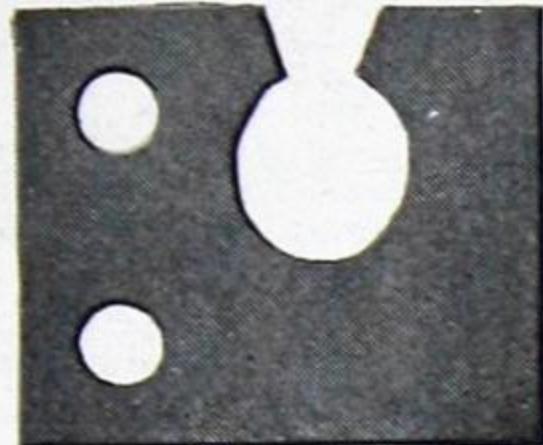
## MAXIMUM SPANS AS CENTERING TO SUPPORT WET CONCRETE

Maximum Spans for Centering	Wgt. of $\frac{3}{4}$ " Hy-Rib Per Sq. Ft.	Thickness of Slab above Base of Hy-Rib
3'-4"	.58	2" thick slab Wgt. = 24 lbs. per sq. ft.
3'-8"	.68	
3'-11"	.78	
3'-0"	.58	2 $\frac{1}{2}$ " thick slab Wgt. = 30 lbs. per sq. ft.
3'-3"	.68	
3'-6"	.78	
2'-9"	.58	3" thick slab Wgt. = 36 lbs. per sq. ft.
3'-0"	.68	
3'-3"	.78	
2'-6"	.58	3 $\frac{1}{2}$ " thick slab Wgt. = 42 lbs. per sq. ft.
2'-9"	.68	
3'-0"	.78	
2'-4"	.58	4" thick slab Wgt. = 48 lbs. per sq. ft.
2'-7"	.68	
2'-9"	.78	

For greater spans use temporary supports.

## ACCESSORIES USED IN HY-RIB CONSTRUCTION

### TRUSCON PLATE CLIPS



TRUSCON plate clips for attachment of Hy-Rib to steel work are made from spring steel and when driven onto the flange of structural channels, angles or I-beams, they bite into the steel so that it is practically impossible to remove them. This is the most economical and rigid method of attaching Hy-Rib to sidewalls or roofs.

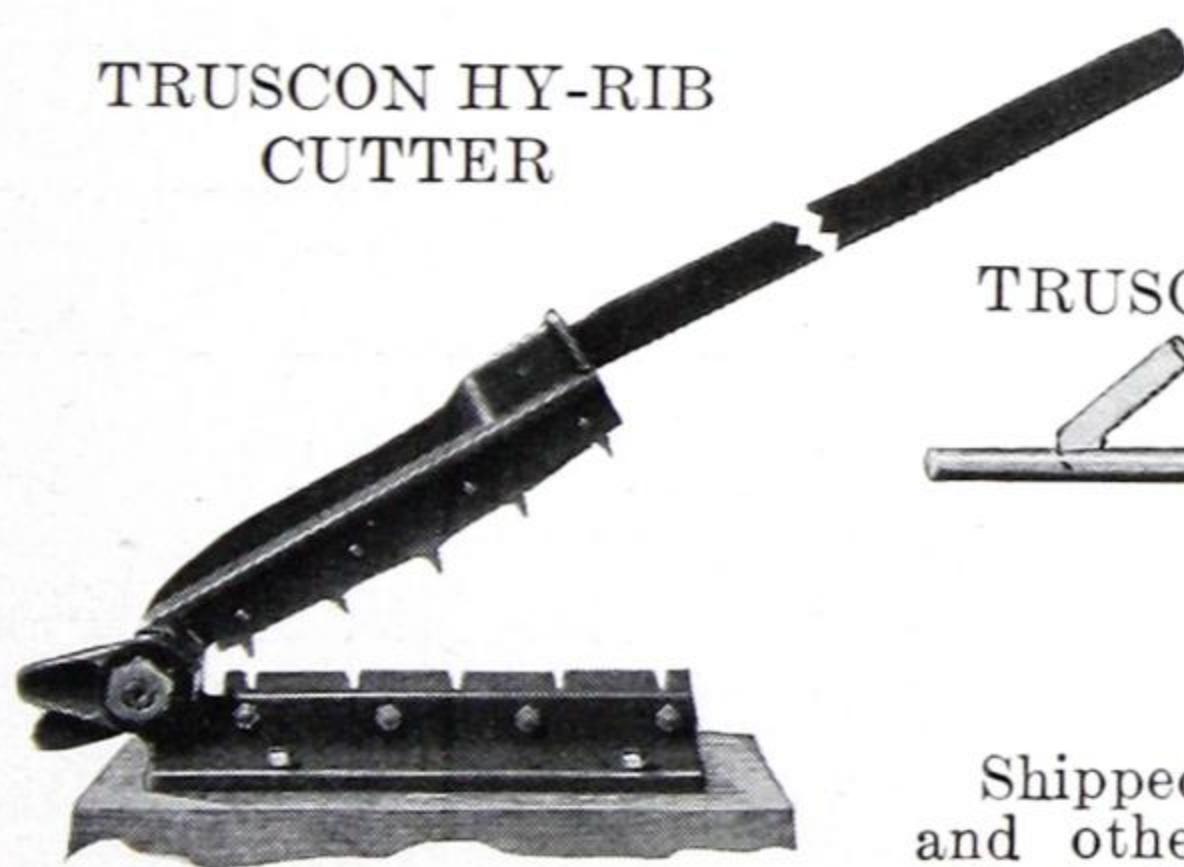
When plate clips are used with  $\frac{3}{4}$ " Hy-Rib a 6d or 8d nail may be used, driving it through the rib of the lath and passing through one of the holes in the clip.  $\frac{3}{8}$ " Hy-Rib is generally wired.

### PLATE CLIPS FOR STANDARD SECTIONS

I-Beams:	18"	15"	12"	10"	9"	8"	7"	6"	5"	4"	3"
Depth	55	42	31 $\frac{1}{2}$	25	21	18	15	12 $\frac{1}{4}$	9 $\frac{3}{4}$	7 $\frac{1}{2}$	5 $\frac{1}{2}$
Wt. lbs.											
Size of Plate Clips	$\frac{1}{2}"$	$\frac{7}{16}"$	$\frac{3}{8}"$	$\frac{5}{16}"$	$\frac{5}{16}"$	$\frac{5}{16}"$	$\frac{5}{16}"$	$\frac{1}{4}"$	$\frac{1}{4}"$	$\frac{1}{4}"$	$\frac{1}{16}"$
Channels:	15"	13"	12"	10"	9"	8"	7"	6"	5"	4"	3"
Depth	33	32	20 $\frac{1}{2}$	15	13 $\frac{1}{4}$	11 $\frac{1}{4}$	9 $\frac{3}{4}$	8	6 $\frac{1}{2}$	5 $\frac{1}{4}$	4 $\frac{1}{2}$
Wt. lbs.											
Size of Plate Clips	$\frac{7}{16}"$	$\frac{3}{8}"$	$\frac{3}{8}"$	$\frac{5}{16}"$	$\frac{1}{4}"$	$\frac{1}{4}"$	$\frac{1}{4}"$	$\frac{1}{4}"$	$\frac{1}{4}"$	$\frac{1}{4}"$	$\frac{1}{16}"$

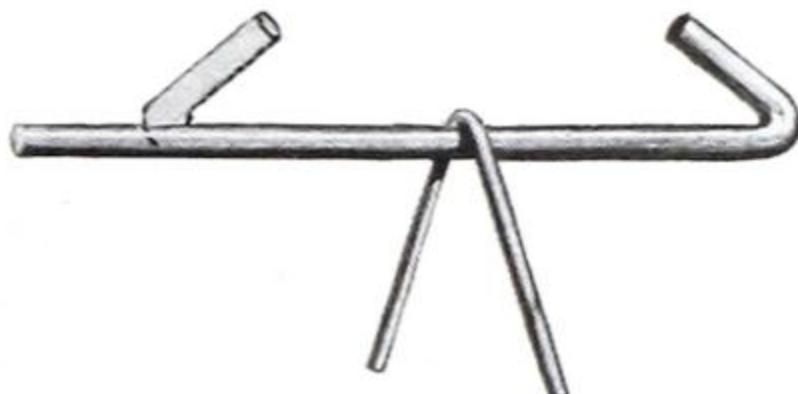
Angles: Size of plate clip is always the same as thickness of angles: i. e.,  $\frac{7}{16}"$  angle requires a  $\frac{7}{16}"$  plate clip.

### TRUSCON HY-RIB CUTTER

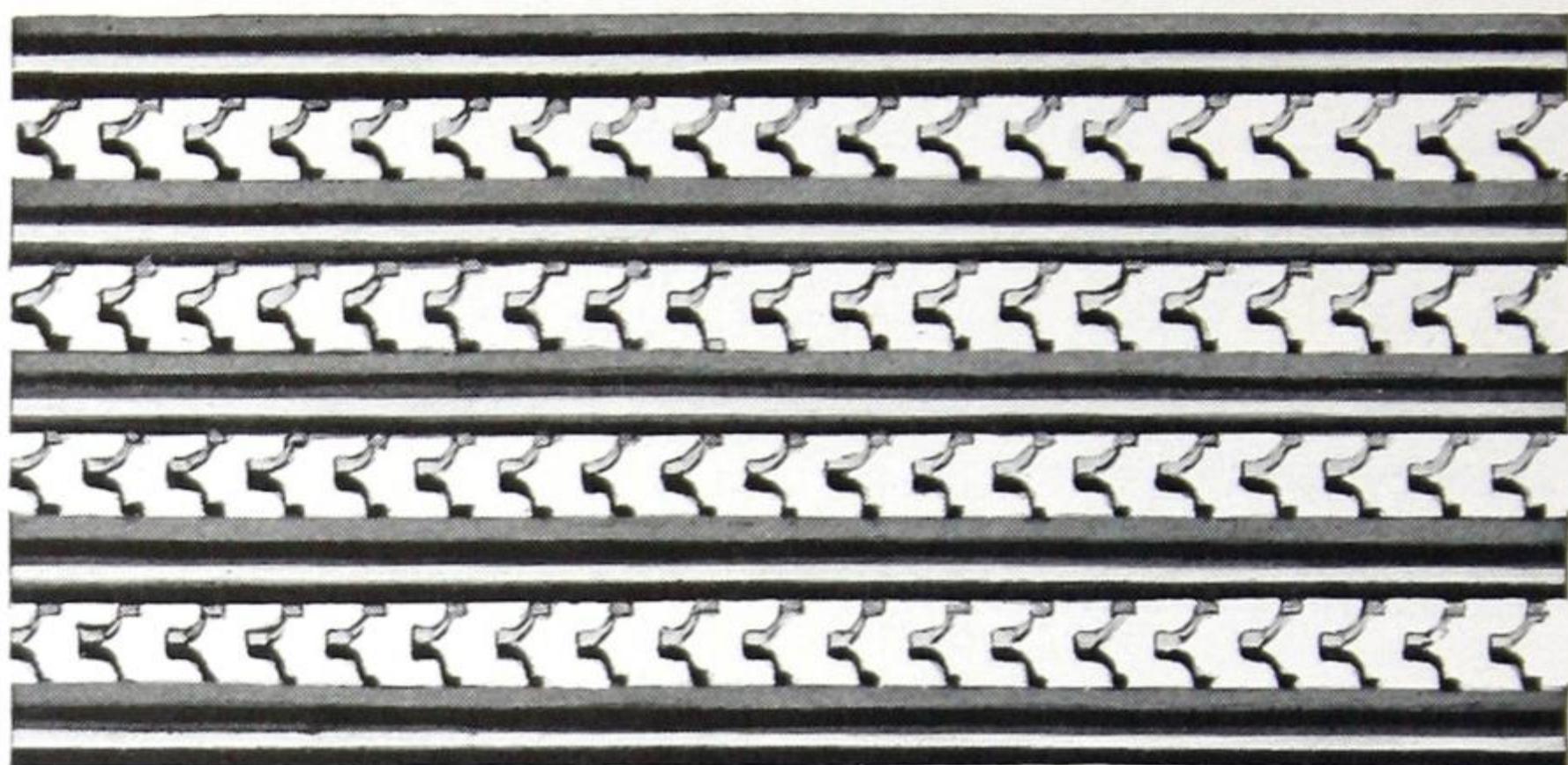


For shearing Hy-Rib. Furnished complete, ready for mounting.

### TRUSCON RIB CLIPS



Shipped with one end bent and other straight. Used principally for supporting Hy-Rib ceilings from steel beams; also for attaching top of partition to steel beams.



## TRUSCON LORIB

A VERY economical lath, as it permits of wider spacing of the studs and effects a very great saving in labor and materials.

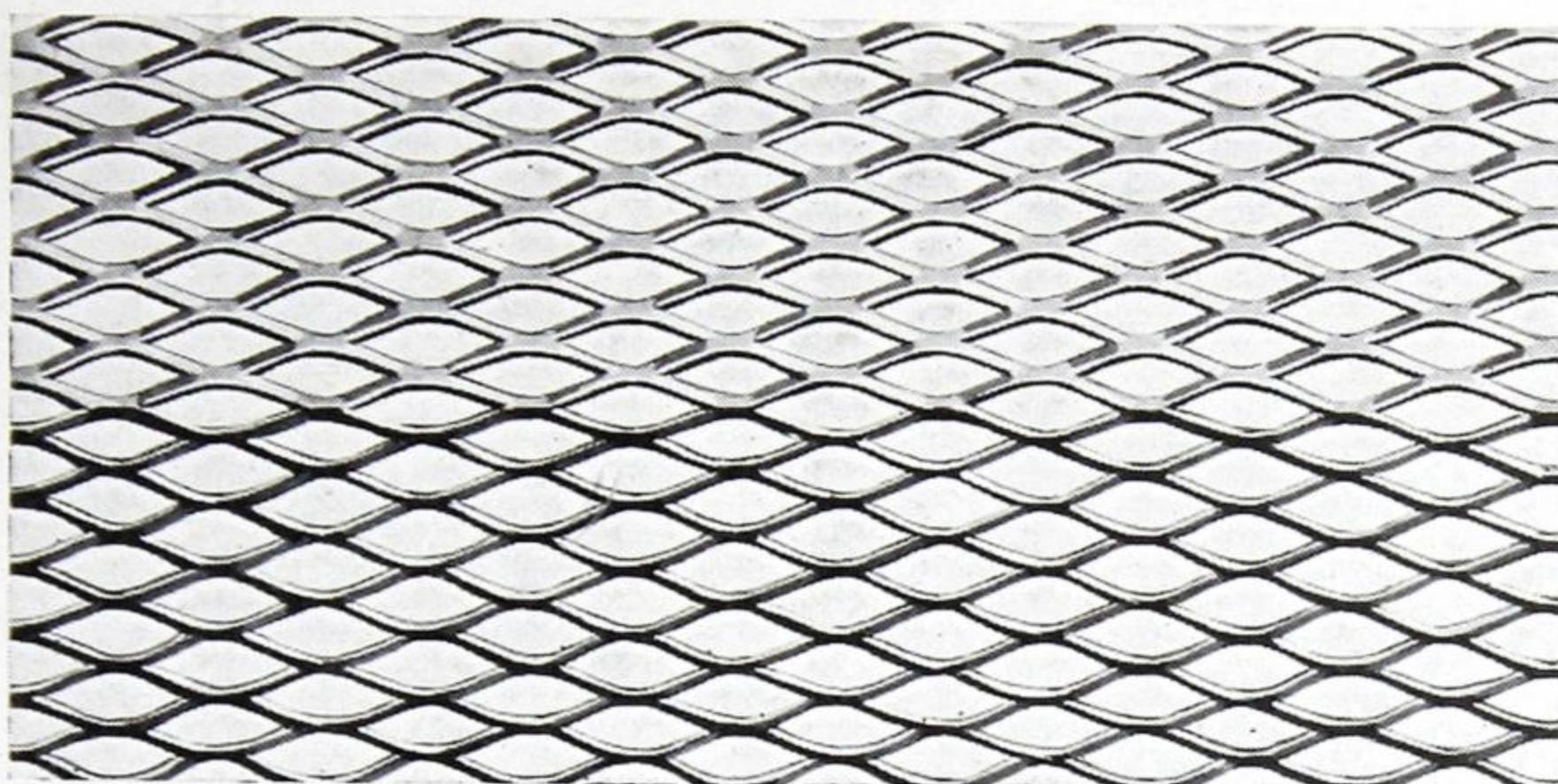
Size of sheets—18 x 96 inches.

Shipped in bundles containing 12 sheets, or 16 yards.

Grade	Weight Per Sq. Yd.	Stud Spacing for Walls C to C	Joist Spacing for Ceiling C to C
LoRib	3.2 lbs.	16" to 24"	16" to 19"

Furnished in Open Hearth Steel. Painted.

Advantages of LoRib—Stiffest steel lath because of ribs. Provides perfect clinch for plaster. Requires minimum amount of plaster. Presents flat rigid surface for plaster.



## TRUSCON DIAMOND MESH LATH

TRUSCON Diamond Lath is the most practical type of diamond lath on the market. Sheets are trimmed exactly 8 feet 1 inch in length, wire edges absolutely straight, thereby saving in laps.

Truscon Diamond Lath is extremely rigid and the maximum size sheets permits low cost of erection. Easily cut, bent or formed in any shape to meet building requirements. Particularly recommended for fire-stops, cornices, false beam and column work, as well as solid partitions.

Shipped in bundles of 9 sheets or 16 sq. yds.

Size of sheet 24 x 97 inches, weight per sq. yd.  $2\frac{1}{2}$  lbs. and 3 lbs.

Weight per Sq. Yd.	Stud Spacing for Walls	Joist Spacing for Ceilings
$2\frac{1}{2}$ lbs.	Up to 12 in.	Up to 12 in.
3 lbs.	Up to 16 in.	Up to 16 in.

Furnished from Copper Bearing Steel Painted or from Galvanized.

# WALLS, PARTITIONS AND CEILINGS

## REINFORCED HY-RIB WALLS\*

Spacing of Supports	Thickness of Wall	REINFORCEMENT †	
2'-0" or less	1 $\frac{3}{4}$ "	$\frac{3}{8}$ " Hy-Rib Lath	3.0
2'-6" or less	1 $\frac{3}{4}$ "	$\frac{3}{8}$ " Hy-Rib Lath	3.5
3'-0" or less	1 $\frac{3}{4}$ "	$\frac{3}{8}$ " Hy-Rib Lath	4.0
5'-0" or less	2"	$\frac{3}{4}$ " Hy-Rib	.58
6'-0" or less	2"	$\frac{3}{4}$ " Hy-Rib	.68
7'-0" or less	2"	$\frac{3}{4}$ " Hy-Rib	.78
8'-0" or less	2 $\frac{1}{2}$ "	$\frac{3}{4}$ " Hy-Rib	.78

\*Minimum requirements.

†Ribs of Hy-Rib running horizontally.

Unless otherwise specified sheets should be placed with ribs running horizontally. In walls and sidings where main ribs of Hy-Rib run vertically, 7/32" or 1/4" round rods shall be attached to rib side of lath spaced not to exceed 24" on centers, and at right angles to the ribs.

## SOLID PARTITIONS

Spacing of Studs or Channels in Partitions	REINFORCEMENT	
	Type of Lath	Weight
12" to 16"	Diamond Laths	2.5 to 3 lbs.
19" to 24"	$\frac{3}{8}$ " Hy-Rib Lath	3.0 lbs. sq. yd.
24" to 30"	$\frac{3}{8}$ " Hy-Rib Lath	3.5 lbs. sq. yd.
32" to 36"	$\frac{3}{8}$ " Hy-Rib Lath	4.0 lbs. sq. yd.

## WALLS, PARTITIONS AND CEILINGS

### HOLLOW PARTITIONS

(up to 30 ft.)

Spacing of Studs or Channels in Partitions	REINFORCEMENT		
12" to 16"	Diamond Laths		
12" to 19"	$\frac{3}{8}$ " Hy-Rib Lath	2.5 lbs. sq. yd.	
16" to 24"	LoRib Lath	3.2 lbs. sq. yd.	
19" to 24"	$\frac{3}{8}$ " Hy-Rib Lath	3.0 lbs. sq. yd.	
24" to 30"	$\frac{3}{8}$ " Hy-Rib Lath	3.5 lbs. sq. yd.	
32" to 36"	$\frac{3}{8}$ " Hy-Rib Lath	4.0 lbs. sq. yd.	

### CEILINGS

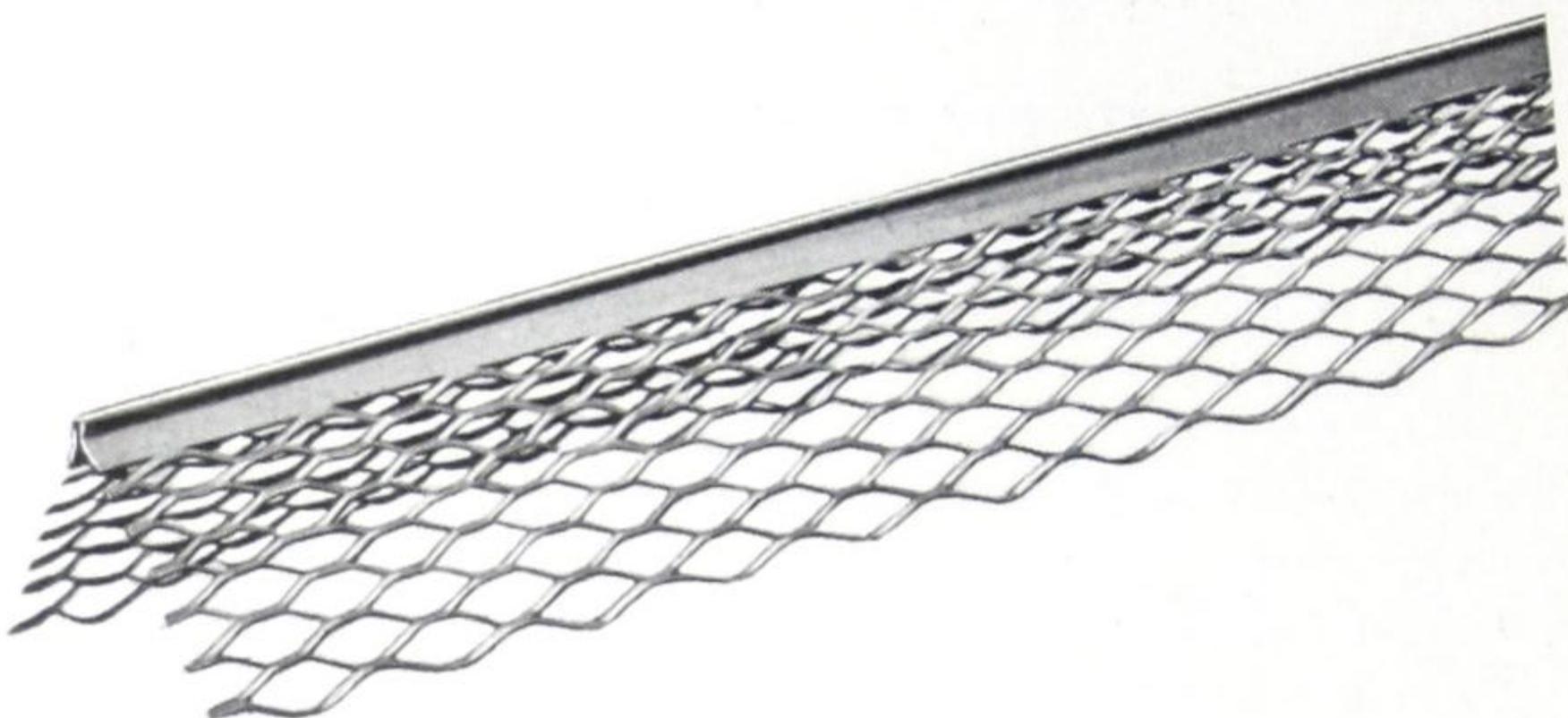
Spacing of Supports	REINFORCEMENT		
12" to 16"	Diamond Lath		
12" to 16"	$\frac{3}{8}$ " Hy-Rib Lath	2.5 lbs. sq. yd.	
12" to 19"	LoRib Lath	3.2 lbs. sq. yd.	
16" to 19"	$\frac{3}{8}$ " Hy-Rib Lath	3.0 lbs. sq. yd.	
19" to 24"	$\frac{3}{8}$ " Hy-Rib Lath	3.5 lbs. sq. yd.	
24" to 30"	$\frac{3}{8}$ " Hy-Rib Lath	4.0 lbs. sq. yd.	

### SUSPENDED CEILINGS

**HANGERS**—not less than 7/32" mild steel rods 1" x 3/16" flats or No. 8 galvanized wire—spaced not over 4 ft. center to center in both directions.

**RUNNER CHANNELS**—not less than 1½" cold rolled channels—spaced not over 4 ft. on centers for furring channels spaced not over 16" centers and not over 3 ft. for greater spacing of furring channels.

**FURRING CHANNELS**—not less than ¾" cold rolled channels.



## TRUSCON EXPANDED CORNER BEADS

**EXPANDED** Corner Bead is manufactured from galvanized copper bearing steel, with a heavy shoulder to assure straightness and rigidity. The round nose is strongly reinforced underneath by a deep groove which holds the plaster flush for a perfect bond at the bead.

The 2½-inch wide expanded apron is made integral with the bead, eliminating the costly necessity of attaching separate clips, and giving from 2-inch to 2¼-inch projection on the plaster base.

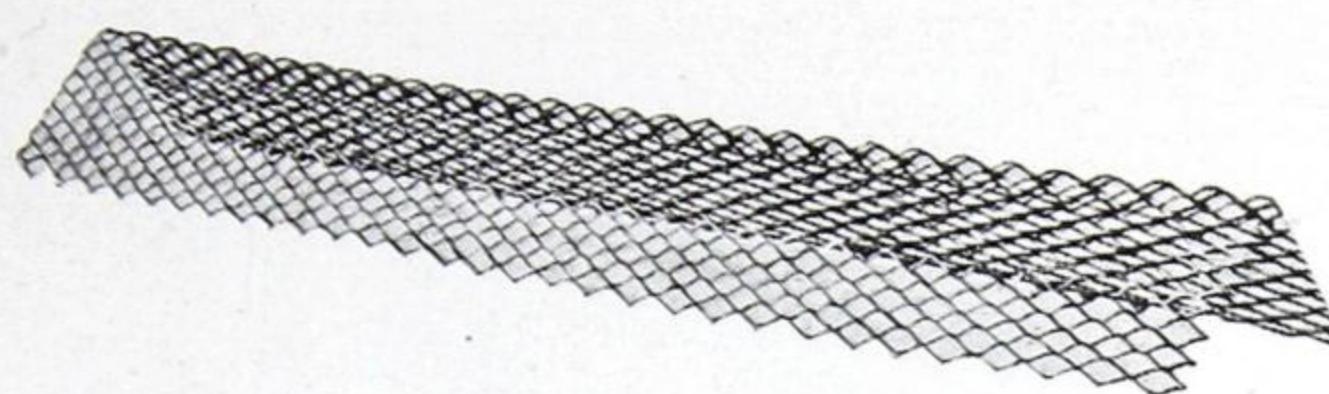
Expanded corner bead can be used with equal facility on wood lath, metal lath or masonry. It is not necessary to limit attachments to certain positions, as the apron will take wire nails at any point along its length.

Expanded corner bead weighs 0.21 pounds per linear foot, and is furnished in 6, 7, 8, 9, 10 and 12 foot lengths, bundled 10 pieces to the bundle.



## TRUSCON RIB STEEL CORNER BEADS

**RIBBED** Steel Corner Beads are especially adapted to all nail-on work. Manufactured in convenient lengths.



## TRUSCON CORNERITE

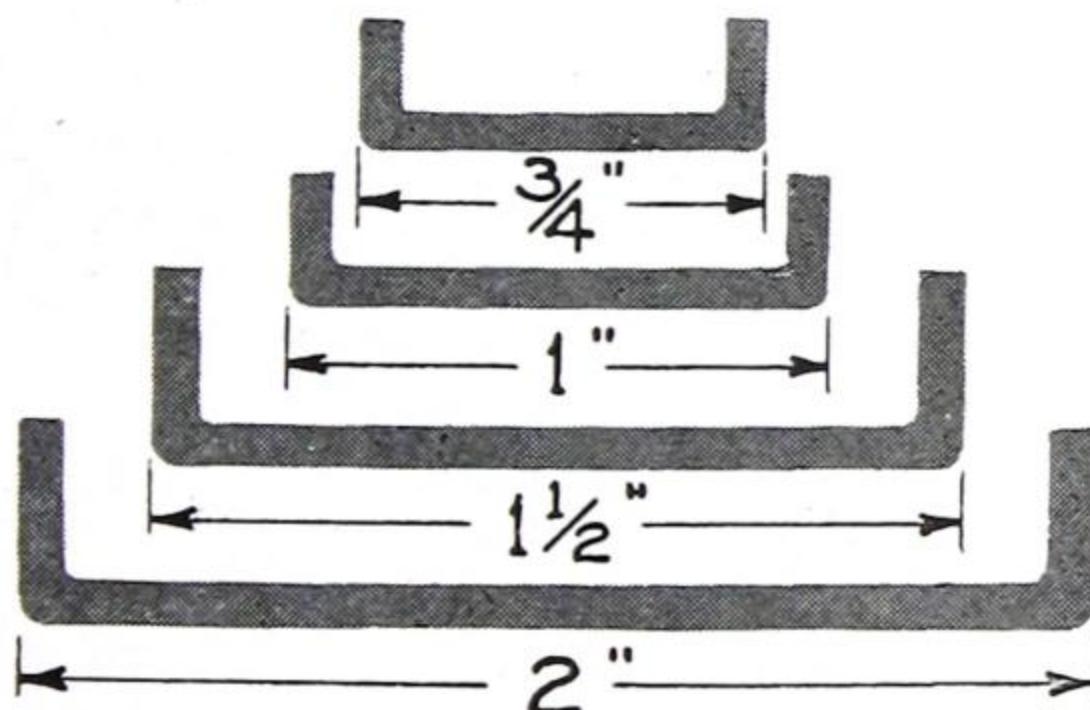
CORNERITES are used for plaster base, at inside corners. Flanges are 3" wide, Sheets 8' 1" long.



## TRUSCON STRIP-ITE

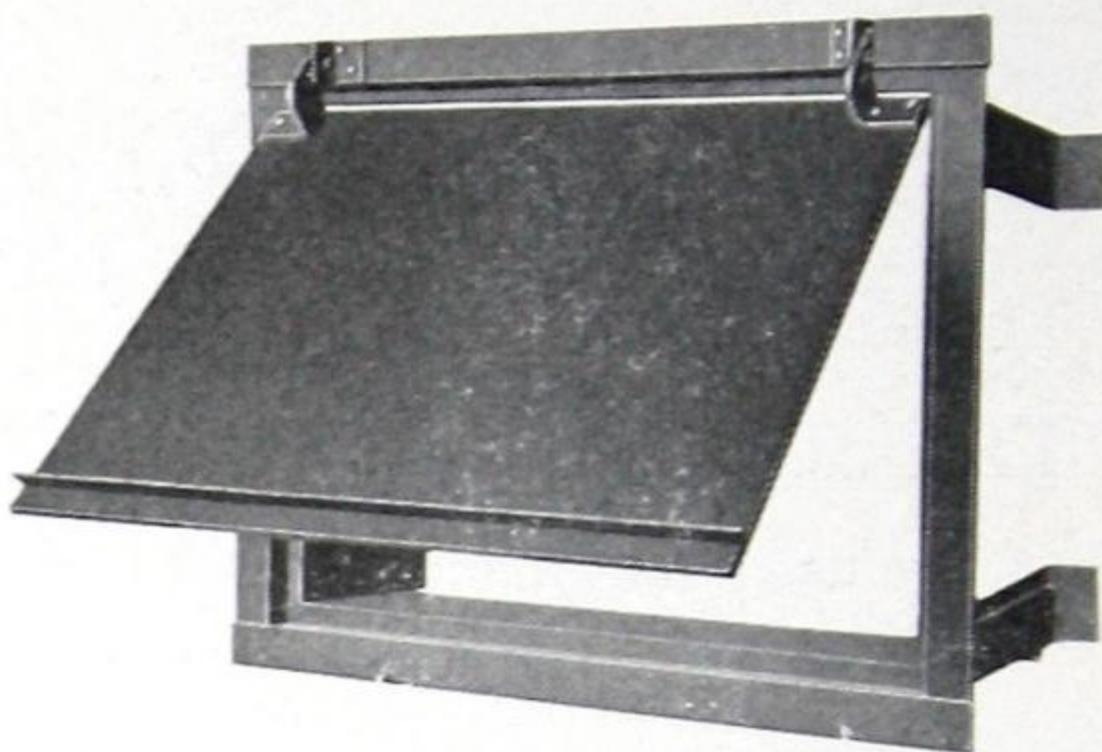
STRIP-ITE is a convenient plaster base for use in narrow places and around odd shaped corners. It will be found particularly useful for forming plaster reveals around window and door openings; for wrapping beams where two or three narrow strips are sufficient to cover an exposed area; for reinforcing the joints between sheets of patented wall boards, and many other purposes.

Strip-Ite is manufactured from 2.5 lb. Diamond Lath, and is furnished in 3 and 6 inch widths, 8' 1" long. It is shipped in bundles of 50 pieces or 400 linear feet.



## TRUSCON COLD ROLLED CHANNELS

Size in Inches	$\frac{3}{4}''$	1"	$1\frac{1}{2}''$	2"
Weight in lbs./16 ga. per lin. foot (18 ga.)	.276 .210	.332	.442	.553



## TRUSCON COAL CHUTES

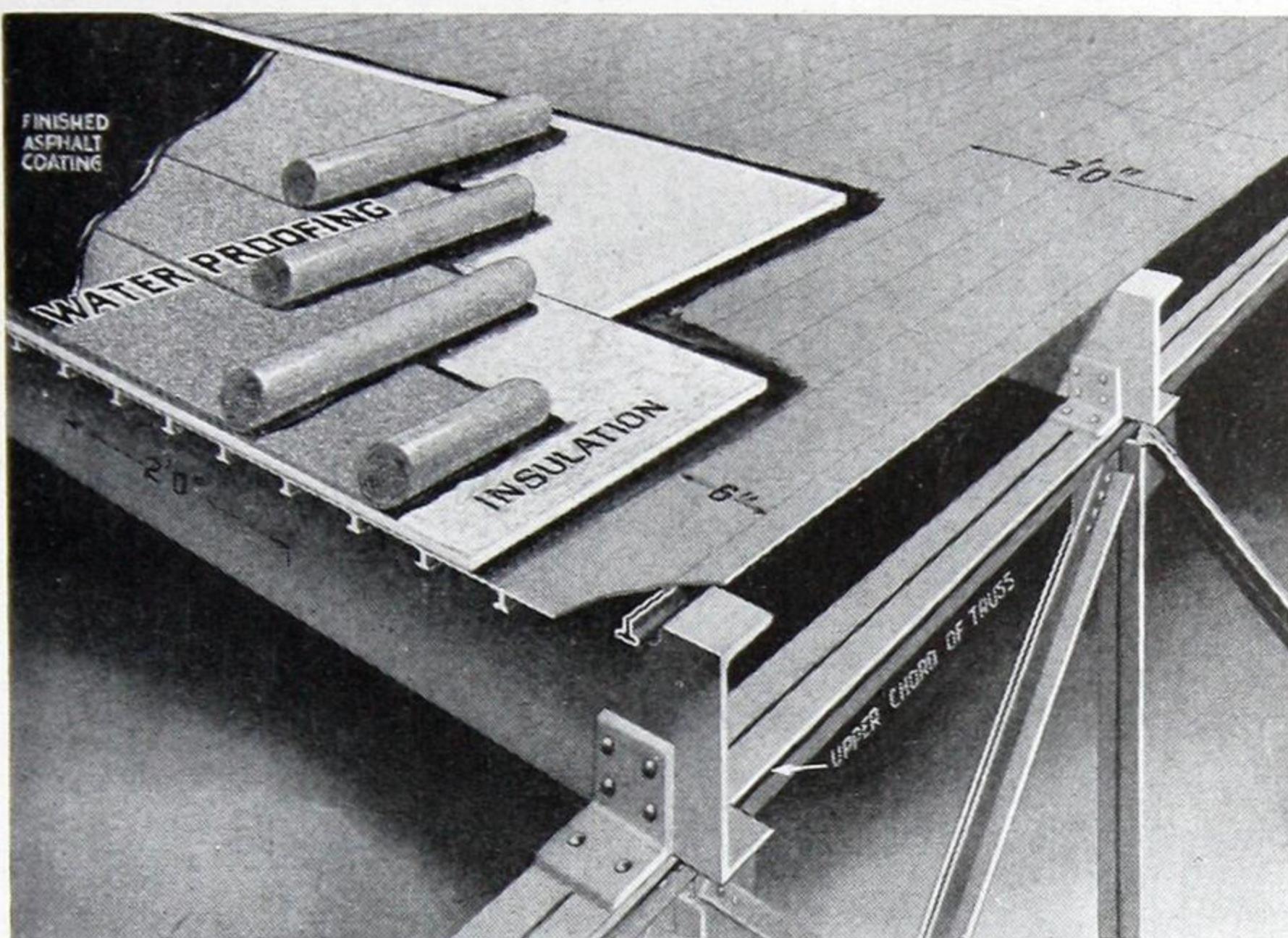
TRUSCON Coal Chutes are pivoted at the top to swing out at the bottom. Adjustable lugs are used to anchor the chute to the wall and still is protected with a 16 gauge apron.

Truscon Coal Chutes are for masonry opening 2'-0" x 1'-6".



## TRUSCON MORTAR BOXES

MADE in 2 standard sizes: 2'-6" wide, 5'-0" long, 10" deep, weight 80 lbs.; 3'-4" wide, 7'-6" long, 10" deep, weight, 164 lbs.; These boxes have many distinctive features. Can be furnished with handles.



## TRUSCON STEELDECK ROOF I-PLATES DESIGN

I-PLATES are manufactured from 18 gauge and 20 gauge copper-bearing steel with I-Sections formed on the bottom side longitudinally. On one edge a complete I-Section is formed, on the other edge a turned down flange of about  $\frac{1}{2}$ " is provided, to fit into the edge I-Sections of adjacent I-Plates when laying the Steeldeck. At one end the L-Sections of the I-Plates are flush with the top surface, at the other end the I-Sections are cut back about  $\frac{3}{4}$ " so that when laid, the end joints are lapped tight.

I-Plates are applied directly over the members of the roof supporting structure and are fastened by sleeve "Purlin Clips" that telescope over alternate I-Sections. They have prongs that are bent around the supporting members (usually purlins), and hold the I-Plates securely.

I-Plates are spliced, when the ends occur between supports, with sleeve "Splice Clips" which telescope and drive over the ends of abutting I-Sections. The "Splice Clips" develop the full carrying capacity of the I-Plates.

Truscon I-Plates Steeldecks have smooth, even surfaces. They are not punctured by attachments for fastening the decks to the supporting structure. They approach the ideal in permanent and incombustible roof decks upon which to apply insulation and waterproofing.

## ADVANTAGES OF I-PLATES CONSTRUCTION

1. Light in weight—not over 5 lbs. per square foot including insulation and waterproofing.
2. Incombustible—fabricated complete from copper-alloy steel.
3. Expansion and Contraction difficulties eliminated. Expansion Joints are provided in two directions at the sides and ends of each I-Plate. There can be no accumulation of appreciable movement. Insulation and waterproofing is positively free from injury by this usual source of trouble.
4. Any degree of proper insulation may be easily obtained.
5. Saves time in completion of buildings, especially in wet and winter seasons.
6. Low final cost—light weight effects savings in structural supports.
7. Engineeringly correct—spans to 8 feet between supports, depending upon the loading requirements.
8. Permanent—made of copper-bearing steel. Protected from above and below.
9. Adaptability—best for straightaway, flat, pitched, and curved roofs with a minimum radius of 40'-0".
10. Undivided responsibility—Roofers will furnish roofs complete—deck, insulation, and waterproofing.

Width of Plates 2'-0"

Length of Plates 8' and 10'

Dimensions of Sections

spaced 6" centers

Depth 1"

Bottom Flange  $\frac{5}{8}$ "

Dead load of I-Plates Steeldeck Roof with insulation and waterproofing is approximately 5 lbs. per sq. ft.

### LIVE LOADS AND SPANS

(The dead load is provided for in this table)

Live Load Lbs. sq. ft.	Spans Purlin to Purlin	
	18 Ga.	20 Ga.
45	6'-7"	5'-8"
40	7'-0"	6'-0"
35	7'-6"	6'-4"
30	8'-0"	6'-10"
25	8'-8"	7'-6"
20	9'-6"	8'-2"

## TRUSCON STEEL SASH

THE average building must have the maximum amount of daylight. This cannot be had by using wood sash, with wide connecting members that block the light to a great extent. As a contrast, the long, thin, symmetrical members of steel sash give practically an all glass opening.

Truscon Steel Sash is provided with ventilators at desired points which allow all the ventilation required for any style of building. For instance, our standard side wall sash with large ventilators near the bottom of the sash in connection with center pivoted or top hung continuous sash in the monitor or saw tooth roof, is the most effective ventilation possible for foundries, forge shops, machine shops and other types of one-story buildings.

The Perfection Ventilator is a type adapted to schools, hospitals, office and apartment buildings, etc.

Mechanical Operators for all types of Truscon sash are designed to comply with individual conditions.

The service of our sash specialists is at your disposal. We will cooperate fully with you in giving complete estimates, designs, details and expert advice. Our representatives are conveniently located throughout Canada and give direct personal service.

## OVERALL DIMENSIONS FOR TRUSCON STEEL SASH WITH T1 OR T2 MULLIONS

Width of Openings	Units Wide	Glass Size										
		10"	11"	12"	13"	14"	15"	16"	17"	18"	19"	20"
1	1	0-11 1/4	1-0 1/4	1-1 1/4	1-2 1/4	1-3 1/4	1-4 1/4	1-5 1/4	1-6 1/4	1-7 1/4	1-8 1/4	1-9 1/4
2	1	1-9 5/8	1-11 5/8	2-1 5/8	2-3 5/8	2-5 5/8	2-7 5/8	2-9 5/8	2-11 5/8	3-1 5/8	3-3 5/8	3-5 5/8
3	1	2-8	2-11	3-2	3-5	3-8	3-11	4-2	4-5	4-8	4-11	5-2
4	1	3-6 3/8	3-10 3/8	4-2 3/8	4-6 3/8	4-10 3/8	5-2 3/8	5-6 3/8	5-10 3/8	6-2 3/8	6-6 3/8	6-10 3/8
5	1	4-4 3/4	4-9 3/4	5-2 3/4	5-7 3/4	6-0 3/4	6-5 3/4	6-10 3/4	7-3 3/4	7-8 3/4	8-1 3/4	8-6 3/4
6	1	5-3 1/8	5-9 1/8	6-3 1/8	6-9 1/8	7-3 1/8	7-9 1/8	8-3 1/8	8-9 1/8	9-3 1/8	9-9 1/8	10-3 1/8
7	1	6-1 1/2	6-8 1/2	7-3 1/2	7-10 1/2	8-5 1/2	9-0 1/2	9-7 1/2	10-2 1/2	10-9 1/2	11-4 1/2	11-11 1/2
8	1	6-11 7/8	7-7 7/8	8-3 7/8	8-11 7/8	9-7 7/8	10-3 7/8	10-11 7/8	11-7 7/8	12-3 7/8		
9	1	7-10 1/4	8-7 1/4	9-4 1/4	10-1 1/4	10-10 1/4	11-7 1/4	12-4 1/4				
10	2	8-1 1/8	8-10 1/8	9-7 1/8	10-4 1/8	11-1 1/8	11-10 1/8	12-7 1/8	13-4 1/8	14-1 1/8	14-10 1/8	
11	2	9-9 7/8	10-8 7/8	11-7 7/8	12-6 7/8	13-5 7/8	14-4 7/8	15-3 7/8	16-2 7/8	17-1 7/8		
12	2	10-8 1/4	11-8 1/4	12-8 1/4	13-8 1/4	14-8 1/4	15-8 1/4	16-8 1/4	17-8 1/4			
13	3	10-0 3/4	10-11 3/4	11-10 3/4	12-9 3/4	13-8 3/4	14-7 3/4	15-6 3/4	16-5 3/4	17-4 3/4		
14	4	10-3 5/8	11-2 5/8	12-1 5/8	13-0 5/8							
15	3	10-11 1/8	11-11 1/8	12-11 1/8	13-11 1/8	14-11 1/8	15-11 1/8	16-11 1/8	17-11 1/8			
16	4	11-2	12-2	13-2	14-2	15-2	16-2	17-2	18-2			

Standard Glass sizes are  
12" x 18" and 14" x 20".  
Other sizes carry an extra

Width of Openings	Lights Wide	Overall Dimensions for Truscon Steel Sash with T1 or T2 Mullions										Glass Size
		10"	11"	12"	13"	14"	15"	16"	17"	18"	19"	
13	2	11-6 $\frac{5}{8}$	12-7 $\frac{5}{8}$	13-8 $\frac{5}{8}$	14-9 $\frac{5}{8}$	15-10 $\frac{5}{8}$	16-11 $\frac{5}{8}$	18-0 $\frac{5}{8}$	19-1 $\frac{5}{8}$			
	3	11-9 $\frac{1}{2}$	12-10 $\frac{1}{2}$	13-11 $\frac{1}{2}$	15-0 $\frac{1}{2}$	16-1 $\frac{1}{2}$	17-2 $\frac{1}{2}$	18-3 $\frac{1}{2}$	19-4 $\frac{1}{2}$			
	4	12-0 $\frac{3}{8}$	13-1 $\frac{3}{8}$	14-2 $\frac{3}{8}$	15-3 $\frac{3}{8}$	16-4 $\frac{3}{8}$	17-5 $\frac{3}{8}$	18-6 $\frac{3}{8}$	19-7 $\frac{3}{8}$			
14	2	12-5	13-7	14-9	15-11	17-1	18-3	19-5	20-7			
	3	12-7 $\frac{7}{8}$	13-9 $\frac{7}{8}$	14-11 $\frac{7}{8}$	16-1 $\frac{7}{8}$	17-3 $\frac{7}{8}$	18-5 $\frac{7}{8}$	19-7 $\frac{7}{8}$	20-9 $\frac{7}{8}$			
	4	12-10 $\frac{3}{4}$	14-0	14-2 $\frac{3}{4}$	16-4 $\frac{3}{4}$	17-6 $\frac{3}{4}$	18-8 $\frac{3}{4}$	19-10 $\frac{3}{4}$	21-0 $\frac{3}{4}$			
15	2	13-3 $\frac{3}{8}$	14-6 $\frac{3}{8}$	15-9 $\frac{3}{8}$	17-0 $\frac{3}{8}$	18-3 $\frac{3}{8}$	19-6 $\frac{3}{8}$	20-9 $\frac{3}{8}$				
	3	13-6 $\frac{1}{4}$	14-9 $\frac{1}{4}$	16-0 $\frac{1}{4}$	17-3 $\frac{1}{4}$	18-6 $\frac{1}{4}$	19-9 $\frac{1}{4}$	21-0 $\frac{1}{4}$				
	4	13-9 $\frac{1}{8}$	15-0 $\frac{1}{8}$	16-3 $\frac{1}{8}$	17-6 $\frac{1}{8}$	18-9 $\frac{1}{8}$	20-0 $\frac{1}{8}$	21-3 $\frac{1}{8}$				
16	2	14-1 $\frac{3}{4}$	15-5 $\frac{3}{4}$	16-9 $\frac{3}{4}$	18-1 $\frac{3}{4}$	19-5 $\frac{3}{4}$	20-9 $\frac{3}{4}$	22-1 $\frac{3}{4}$				
	3	14-4 $\frac{5}{8}$	15-8 $\frac{5}{8}$	17-0 $\frac{5}{8}$	18-4 $\frac{5}{8}$	19-8 $\frac{5}{8}$	21-0 $\frac{5}{8}$	22-4 $\frac{5}{8}$				
	4	14-7 $\frac{1}{2}$	15-11 $\frac{1}{2}$	17-3 $\frac{1}{2}$	18-7 $\frac{1}{2}$	19-11 $\frac{1}{2}$	21-3 $\frac{1}{2}$	22-7 $\frac{1}{2}$				
	5	14-10 $\frac{3}{8}$	16-2 $\frac{3}{8}$	17-6 $\frac{3}{8}$	18-10 $\frac{3}{8}$	20-2 $\frac{3}{8}$	21-6 $\frac{3}{8}$	22-10 $\frac{3}{8}$				
17	2	15-0 $\frac{1}{8}$	16-5 $\frac{1}{8}$	17-10 $\frac{1}{8}$	19-3 $\frac{1}{8}$	20-8 $\frac{1}{8}$	22-1 $\frac{1}{8}$	23-6 $\frac{1}{8}$				
	3	15-3	16-8	18-1	19-6	20-11	22-4	23-9				
	5	15-8 $\frac{3}{4}$	17-1 $\frac{3}{4}$	18-6 $\frac{3}{4}$	19-11 $\frac{3}{4}$	21-4 $\frac{3}{4}$	22-9 $\frac{3}{4}$	24-2 $\frac{3}{4}$				
18	2	15-10 $\frac{1}{2}$										
	3	16-1 $\frac{3}{8}$	17-7 $\frac{3}{8}$	19-1 $\frac{3}{8}$	20-7 $\frac{3}{8}$	22-1 $\frac{3}{8}$						
	4	16-4 $\frac{1}{4}$	17-10 $\frac{1}{4}$	19-4 $\frac{1}{4}$	20-10 $\frac{1}{4}$	22-4 $\frac{1}{4}$	23-10 $\frac{1}{4}$	25-4 $\frac{1}{4}$				
	5	16-7 $\frac{1}{8}$	18-1 $\frac{1}{8}$	19-7 $\frac{1}{8}$	21-1 $\frac{1}{8}$	22-7 $\frac{1}{8}$	24-1 $\frac{1}{8}$	25-7 $\frac{1}{8}$				
19	3	16-11 $\frac{3}{4}$	18-6 $\frac{3}{4}$									
	5	17-5 $\frac{1}{2}$	19-0 $\frac{1}{2}$	20-7 $\frac{1}{2}$	22-2 $\frac{1}{2}$	23-9 $\frac{1}{2}$	25-4 $\frac{1}{2}$	26-11 $\frac{1}{2}$				
20	3	17-10 $\frac{1}{8}$	19-6 $\frac{1}{8}$	21-2 $\frac{1}{8}$								
	4	18-1	19-9	21-5								
	5	18-3 $\frac{7}{8}$	19-11 $\frac{7}{8}$	21-7 $\frac{7}{8}$	23-3 $\frac{7}{8}$	24-1 $\frac{7}{8}$						

Standard Glass sizes are

12" x 18" and 14" x 20."

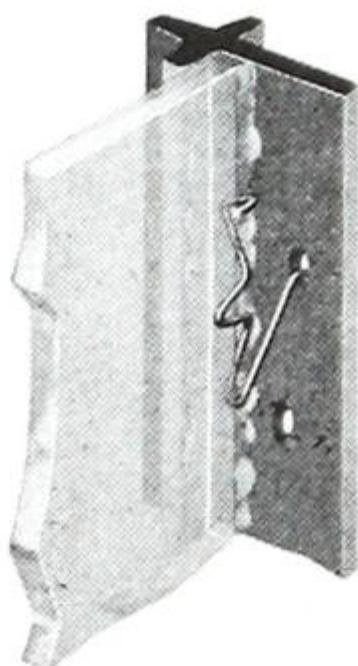
Other sizes carry an extra

## CONSTRUCTION OF TRUSCON STEEL SASH

TRUSCON Stock and Standard Sash is made from solid rolled steel sections. Vertical and horizontal muntin bars are united by means of a dovetailed interlocking joint. The members are not distorted or weakened in assembling. Flat, double contact weathering extends on all sides of ventilators. Notice in the sectional view the wide bearing and anchorage for the sash frame.

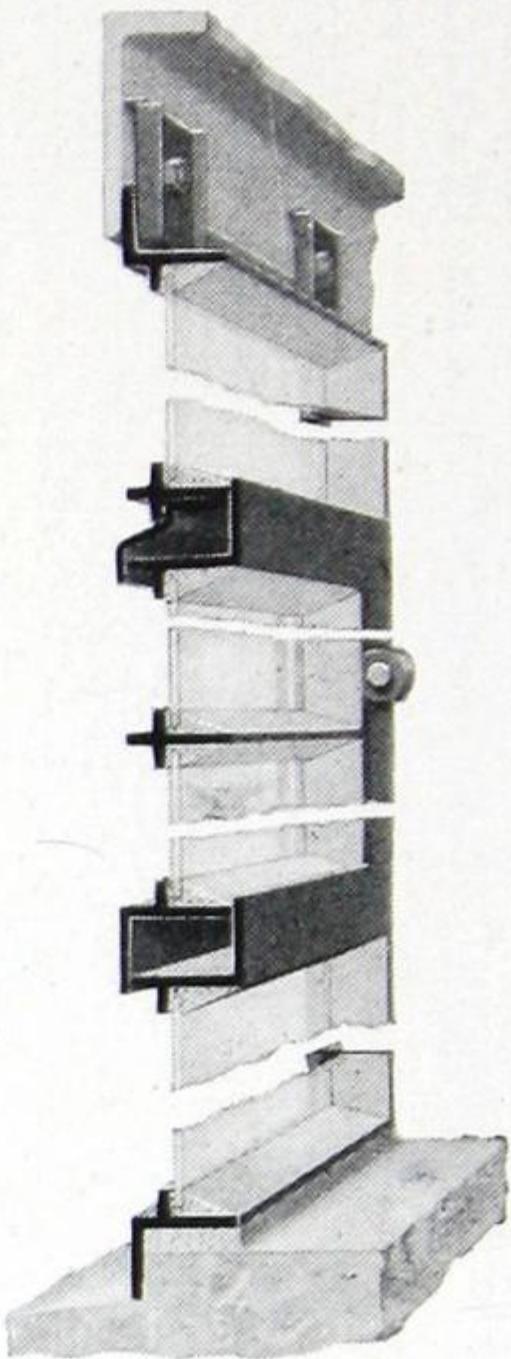
### GLAZING

Truscon Steel Sash is glazed from the inside, each light being held in place by means of four wire glazing clips. The putty is applied in the usual way. Be sure to use steel sash putty as ordinary putty will not harden satisfactorily on steel.



Glazing Clip

Designated glass sizes occur only in stationary portion of windows. All lights at top and bottom of ventilators must be 1" shorter and all lights at sides of ventilators must be 1" narrower than in stationary portion of the windows.

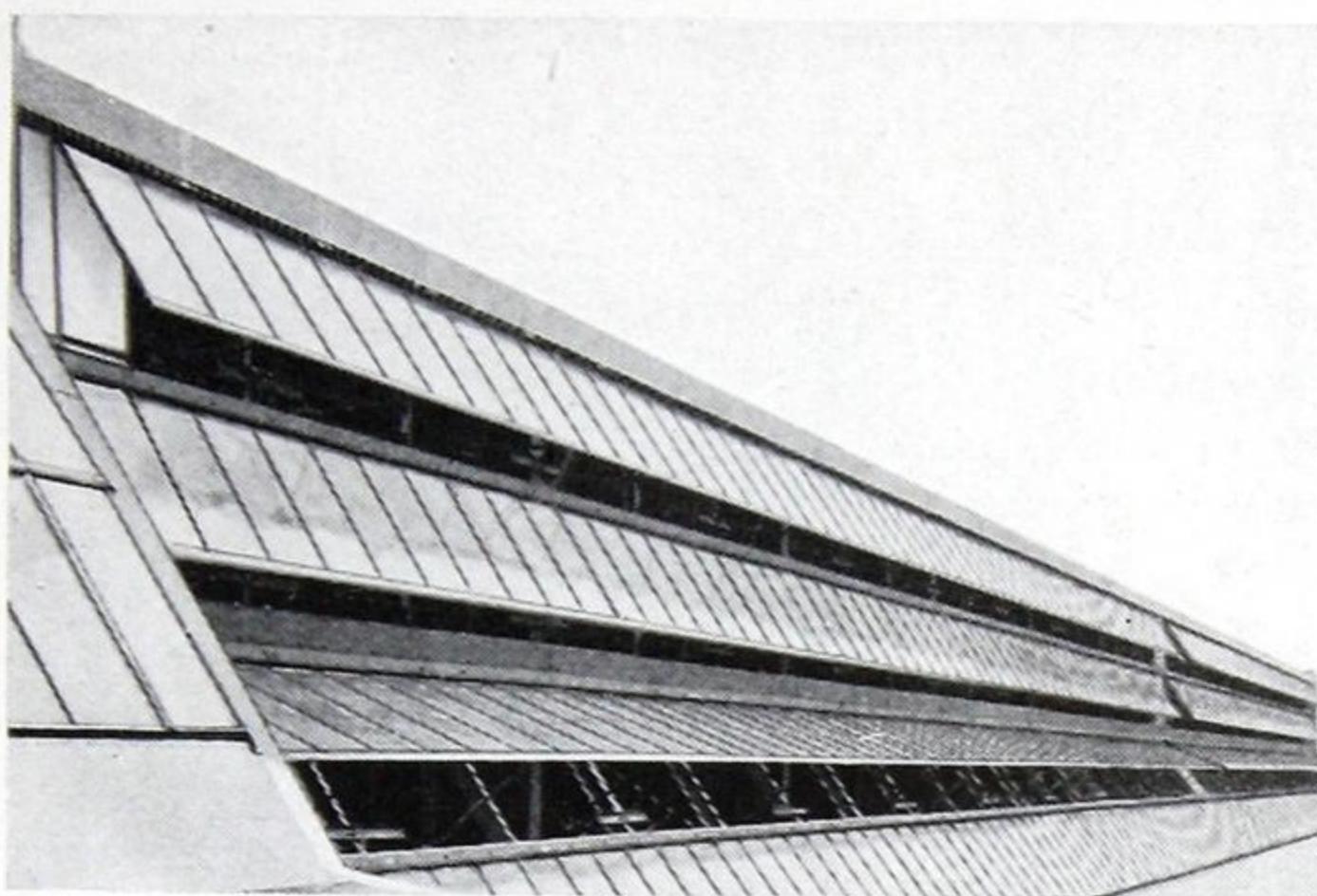


Vertical Sectional Perspective

### GLASS SIZES

| $\frac{14}{20}$ " |
|-------------------|-------------------|-------------------|-------------------|-------------------|
| $\frac{14}{20}$ " | $\frac{13}{19}$ " | $\frac{14}{19}$ " | $\frac{13}{19}$ " | $\frac{14}{20}$ " |
| $\frac{14}{20}$ " | $\frac{13}{19}$ " | $\frac{14}{19}$ " | $\frac{13}{19}$ " | $\frac{14}{20}$ " |
| $\frac{14}{20}$ " |

## TRUSCON CONTINUOUS STEEL SASH

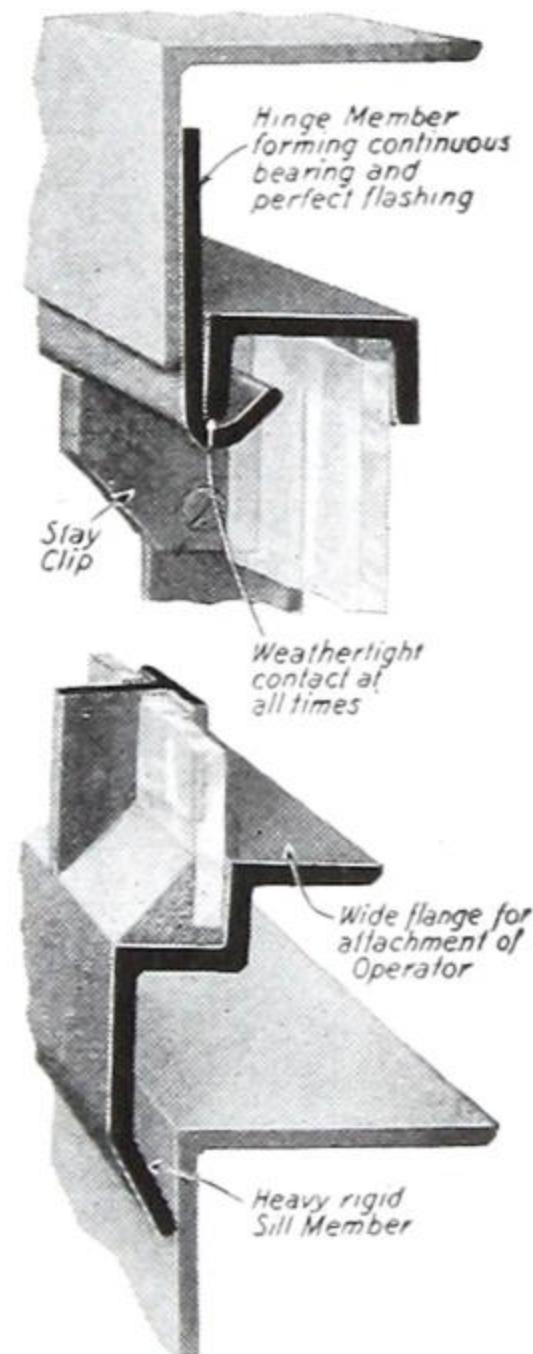


Typical installation of Top Hung Truscon Continuous Sash  
FORD MOTOR COMPANY, FORD, ONT.

TO meet the requirements of maximum daylight and ventilation in monitor and sawtooth roof construction, Truscon Continuous Steel Sash was designed. This sash affords a long continuous opening for ventilation. Continuous Sash is furnished in all types of top-hung, bottom-hung, center-pivoted or fixed sash, or any combination of them.

Truscon Continuous Sash may be used with equal efficiency in any type of construction in a vertical or sloping plane. Requirements vary with every manufacturing need.

The improved method of support, consisting of continuous bearing, eliminates hinges, evenly distributes the weight throughout its length and provides an absolutely weathertight contact with no openings for rain or snow to enter.



Typical Sectional View

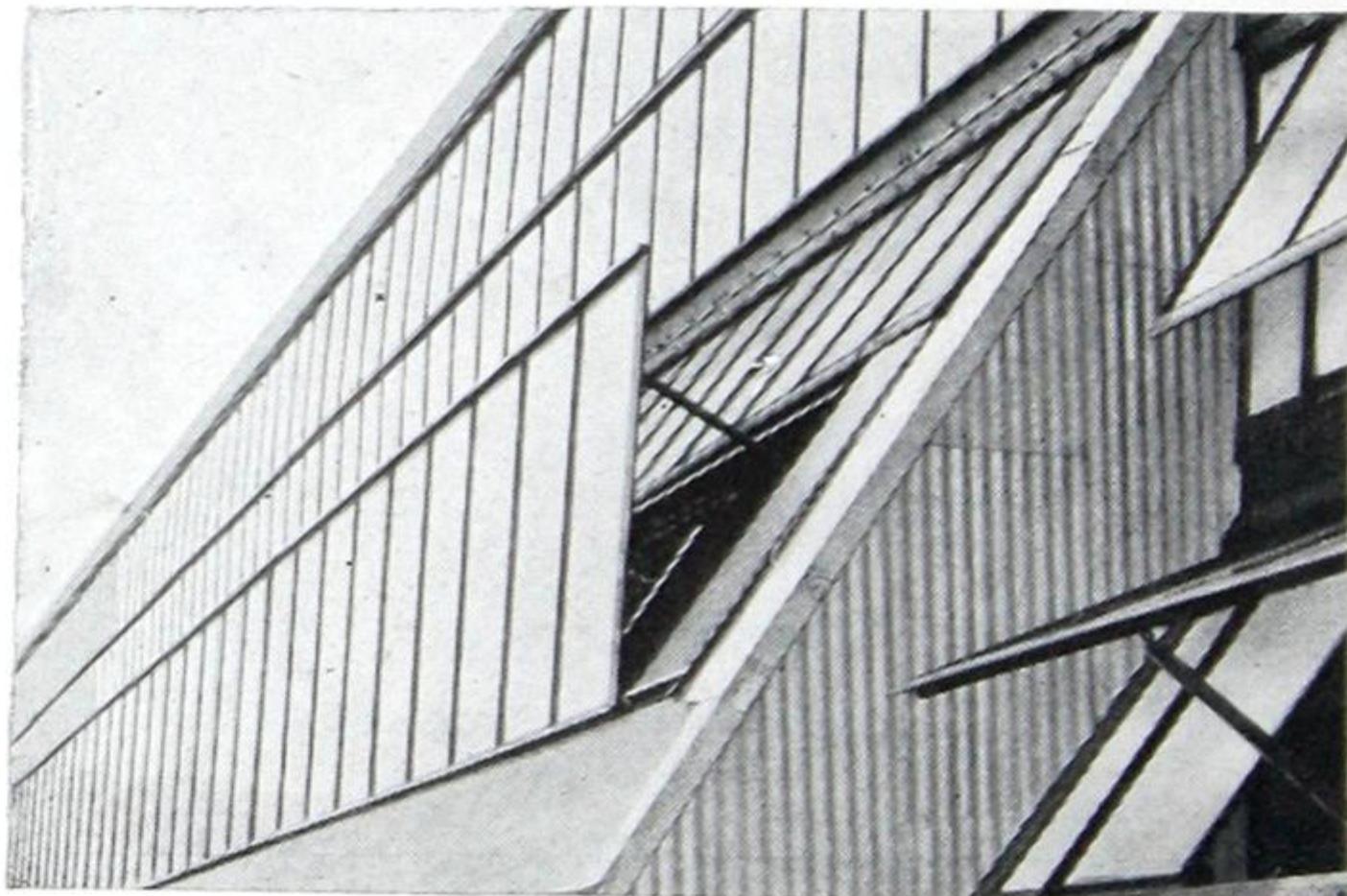
Units of Truscon Continuous Sash are joined by means of adjustable plate mullions that offset irregularities in the structural work without impairing the efficiency of the sash.

Design and operation of every installation of Truscon Continuous Sash is an individual problem and our corps of daylight engineers are always at your service to assist in making designs and recommendations.

### STANDARD SIZES

Height of Sash	Height of Opening	GLASS SIZES		
		Standard Panels	Fixed Panels	Storm Panels
3'-0"	2'-10 1/2"	23 3/8" x 32 3/4"	22 3/8" x 32 3/4"	23 3/8" x 32 3/4"
4'-0"	3'-10 1/2"	23 3/8" x 44 3/4"	22 3/8" x 44 3/4"	23 3/8" x 44 3/4"
5'-0"	4'-10 1/2"	23 3/8" x 56 3/4"	22 3/8" x 56 3/4"	23 3/8" x 56 3/4"
6'-0"	5'-10 1/2"	23 3/8" x 68 3/4"	22 3/8" x 68 3/4"	23 3/8" x 68 3/4"

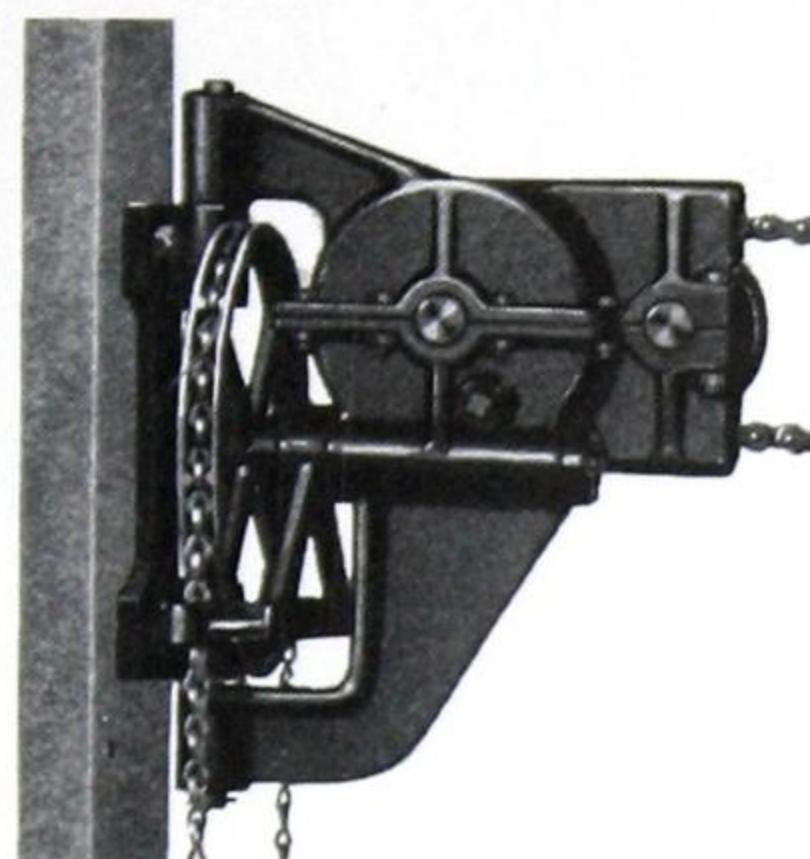
Units are generally designed for a truss spacing of 20 feet on centers. The various units, however, can be combined to fit any length of run.



Typical installation Bottom Hung Truscon Continuous Sash. Notice wide direct flue.

CANADIAN, LIBBY-OWENS SHEET GLASS COMPANY,  
HAMILTON, ONTARIO

## TRUSCON SASH OPERATORS



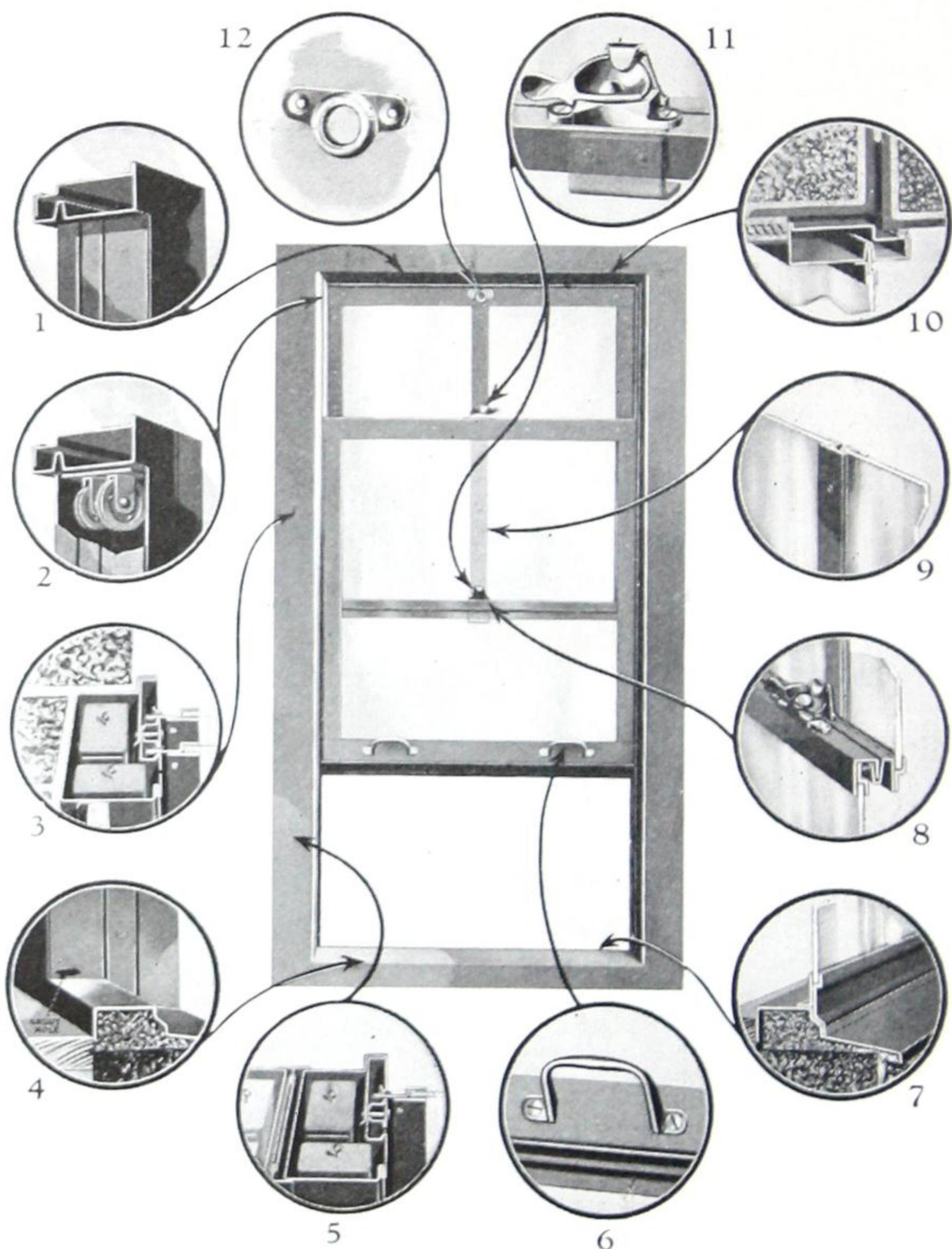
THE selection of the proper operating device is as important as the installation of the sash itself. Operators that fail to function efficiently make the sash investment worthless.

Every installation of Truscon Steel Sash is an individual problem. For this reason a large variety of operating devices has been designed. To recommend any particular type of power to meet all the requirements of engineers and architects is misleading. For instance: runs of Continuous Sash 200' long and 3' high require different gear ratios and operating devices than a run of sash 100' long and 6' high.

Truscon Mechanical Operators are designed to be operated by hand or electric power.

The services of our engineering department should be employed when work of this kind is contemplated. We have specialists ready to cooperate with you without obligation on your part.

TRUSCON  
DOUBLE-HUNG STEEL WINDOWS  
COUNTERWEIGHTED  
MODEL No. 28

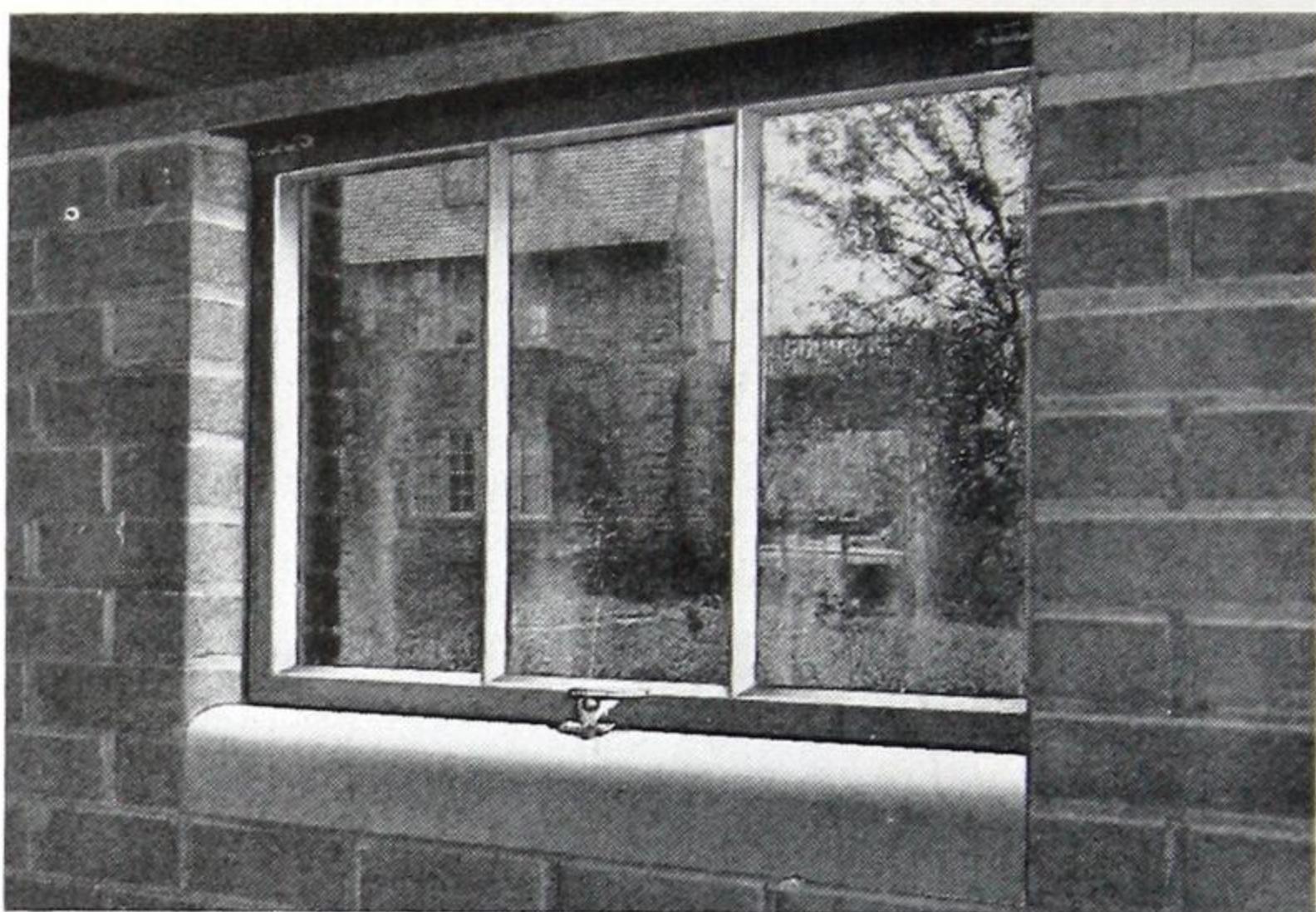


CONSTRUCTION DETAILS AND HARDWARE  
(DESCRIBED ON PAGE 47)

1. SECTION THROUGH HEAD OF FRAME showing one piece channel construction with recess to receive upper sash rail; staff mould formed from two thicknesses of metal and head cover welded to frame section.
2. CUT-AWAY VIEW OF JAMB FRAME showing the deeply grooved, bronze-bushed, pressed steel chain pulleys that turn on hardened steel pins in heavy, pressed steel housings.
3. SECTION THROUGH JAMB illustrating the dual function of the jamb frame as weight box and sash guide. A removable weight-pocket-cover-plate makes the weights easily accessible, and a light metal parting strip between the weights prevents them from becoming twisted. The sash parting stop adjustable. Proper weathering is secured through spring bronze weather stripping.
4. CONCEALED GROUT HOLES at each end of the sill make it easy to fill the opening under the sill with grout, thus assuring a firm and weather tight bed for the window.
5. T-SHAPED MULLIONS for joining two or more windows in a single opening are held in place by means of concealed steel straps which eliminate all unsightly screws, bolts, nuts and other objectionable projections.
6. LIFTING HANDLES: A pair are tap-screwed through two thicknesses of metal to the bottom rail.
7. SECTIONS THROUGH BOTTOM OF WINDOW showing double contact weathering between sash and sill. The sill section of frame is formed from a single piece of steel with all offsets graduated to the outside to insure good drainage. Proper weathering is secured with spring bronze weather stripping.
8. SECTION THROUGH MEETING RAIL showing interlocking contact between the upper and lower sash; and the spring bronze weather stripping on upper rail of lower sash. Brass weathering plates attached to the parting stops at the meeting rail assure additional weather protection. The bottom rail of upper sash is shaped to act as a drip.
9. MUNTING BARS can be furnished horizontally and vertically to secure small-glass-light effects.
10. SECTION THROUGH HEAD OF WINDOW showing adaptability of head section to any type of construction and positive contact between sash and frame. Proper weathering is secured by the use of spring bronze weather stripping.
11. SWEEP LOCK AND PULL DOWN HANDLE, adjustable to secure proper contact and locking.
12. POLE SOCKET attached to the top rail of the upper sash facilitates opening and closing this sash.

NOTE: Standard Hardware is sherardized malleable iron. Solid bronze can be supplied when bronze hardware is specified.

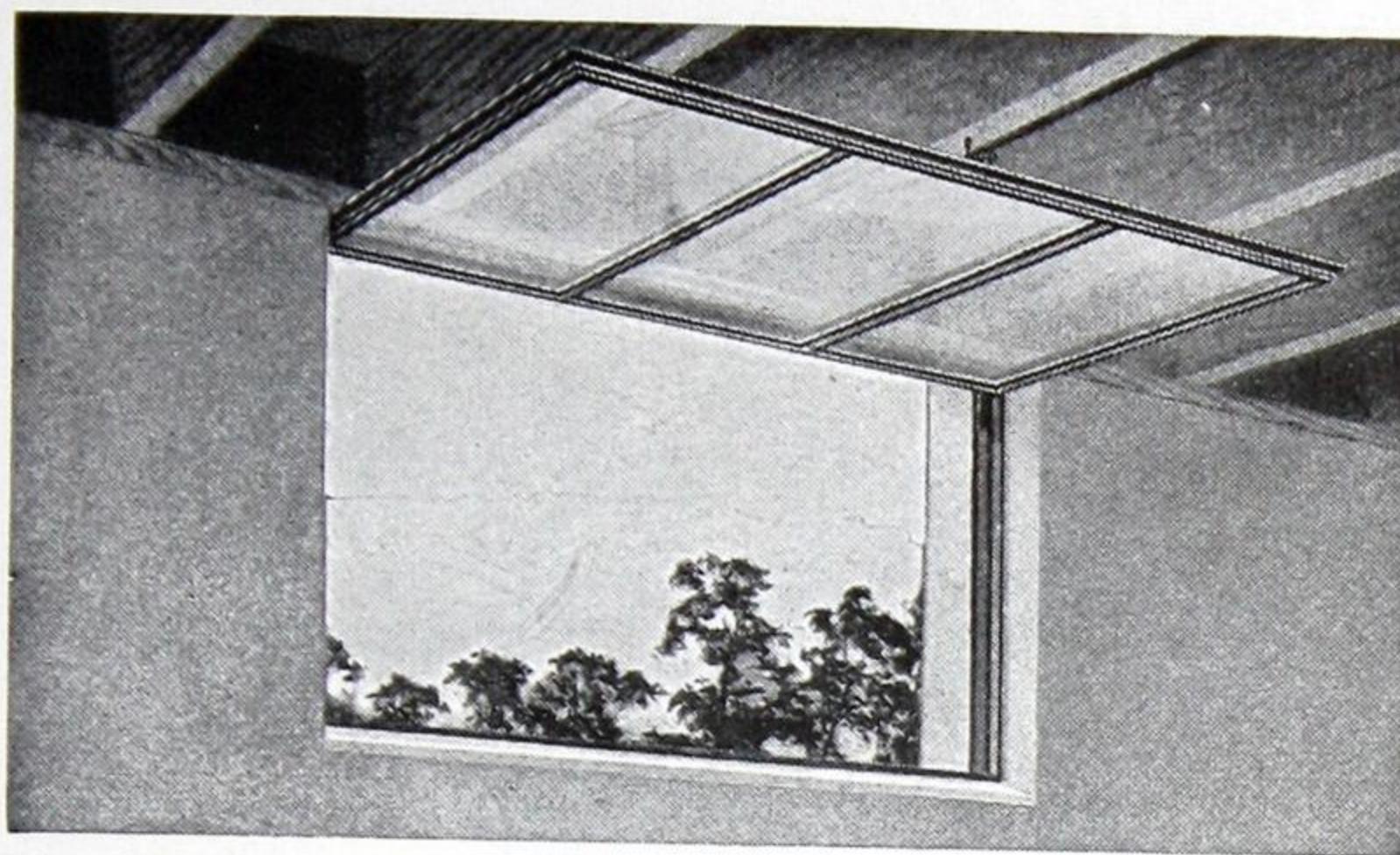
## TRUSCON COPPER STEEL BASEMENT WINDOWS



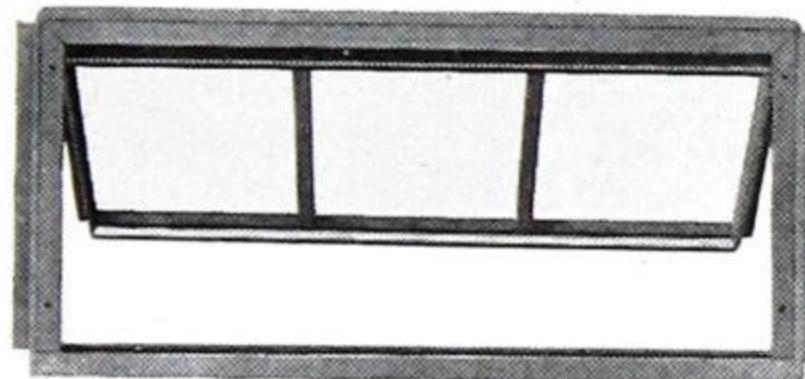
Typical installation in brick foundation. 50% to 80% more daylight than with ordinary wooden windows.

TRUSCON Basement Windows are made from solid rolled copper steel sections, the metal that resists corrosion. They are adaptable for daylighting basements in any type of residential building. They are trim looking and attractive in appearance. They cannot stick or warp. They are always easy to open and close. They lock automatically. Double contact weathering effectively keeps out rain, snow and wind. They are fireproof and indestructible, simple to install and easy to screen.

They give 50% to 80% more daylight from the same window opening than wood, and on this basis cost 30% to 50% less than wood. In making comparisons remember that Truscon Basement Windows come complete with heavy hinges and automatic steel locks attached, while for wood windows you must add cost of frame, sash, hardware, labor of fitting and priming coat of paint. They actually cost as little as wood.

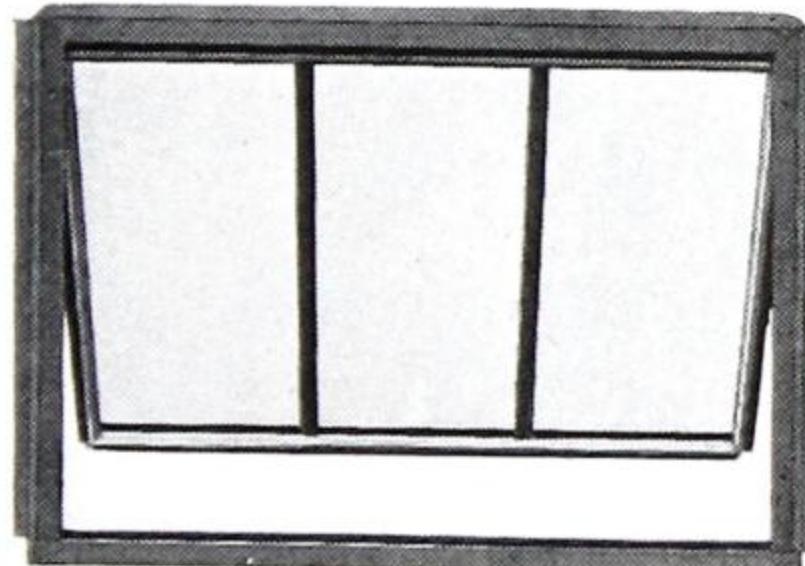


Typical installation in concrete foundation. Truscon Basement Windows never leak or warp and always open easily.



Width 2'-9 $\frac{1}{4}$ " Height 1'-6 $\frac{3}{4}$ "  
TYPE A

Glass Size 10" x 16"

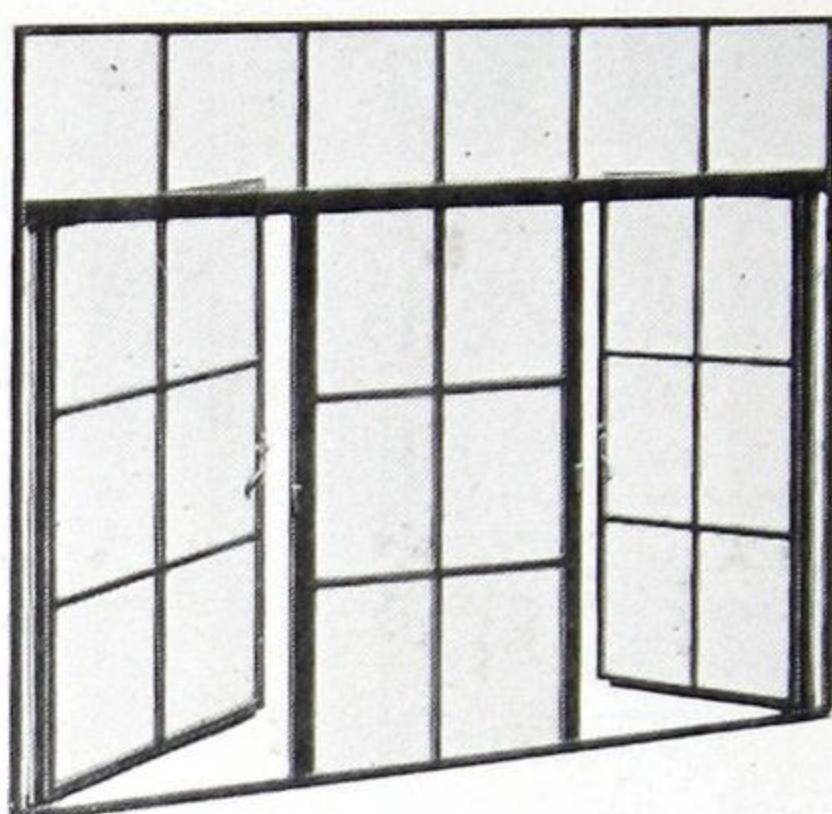


Width 2'-8" Height 2'-3"

TYPE B

Glass Size 9 $\frac{1}{2}$ " x 24 $\frac{1}{4}$ "

TYPE C, Truscon Copper Steel Basement Windows made in width 2'-9 $\frac{1}{4}$ "; height 1'-2 $\frac{3}{4}$ " and glass size 10" x 12".



## TRUSCON STANDARD STEEL CASEMENTS

GOOD taste and individuality express themselves in windows, more perhaps, than in any other detail of home appointment, and in turn the windows play an important part in adding beauty to the interior and bringing the breath of out-of-doors within the four walls.

This is why casements for all rooms are so popular. Their trim outlines and cheery atmosphere bring to the modern building all the charm and hominess of period construction. Casements are the true aristocrats of architecture; they conform perfectly to modern styles and present day requirements.

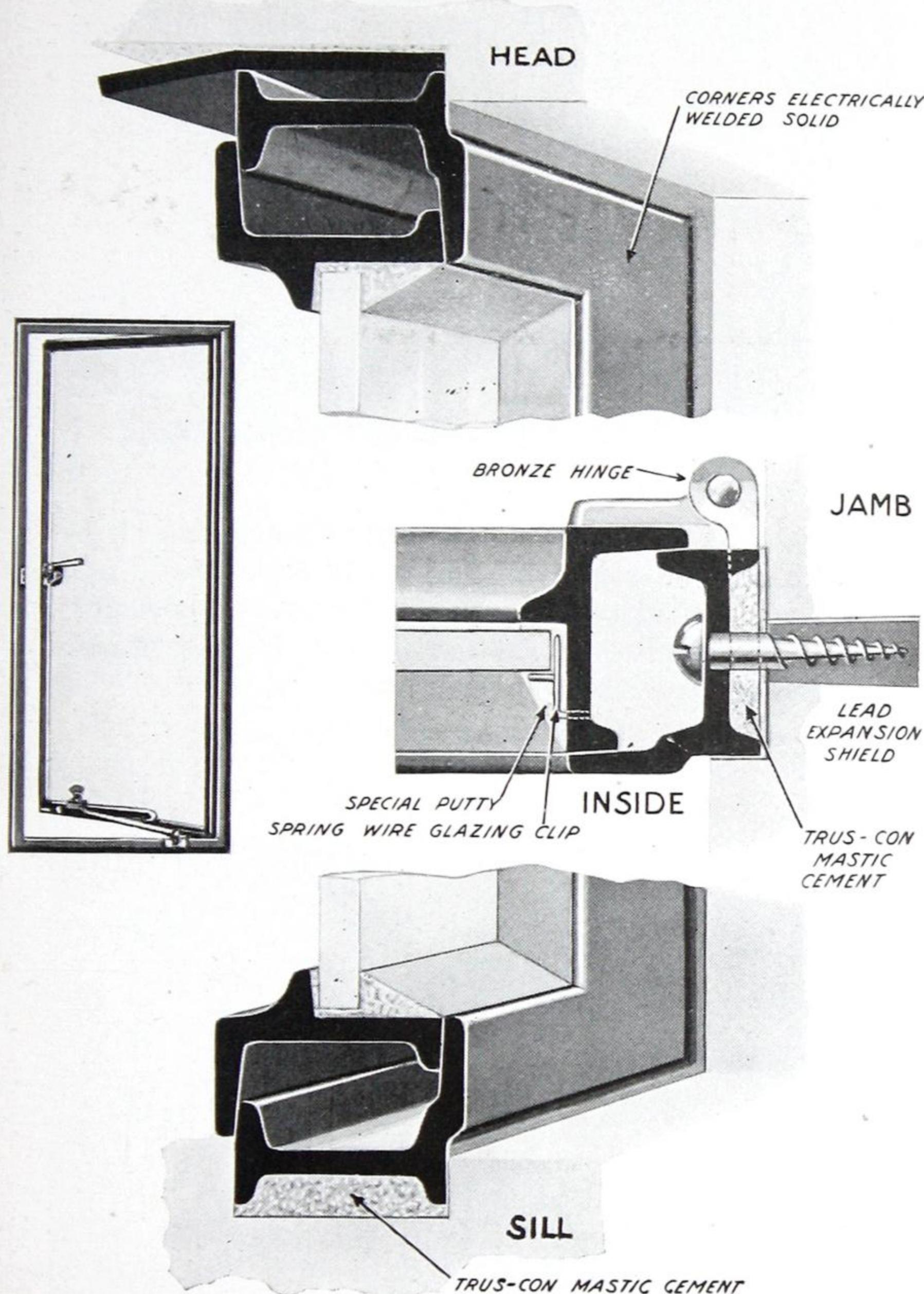
Practical and economical, too, are these sturdy windows which, with all their grace and slenderness of line, never stick or warp. They not only admit air and sunlight—they control ventilation and lighting of all rooms. Drafts and glare are eliminated; draperies and decorations are protected from dust and from the undesirable elements.

Delivered in single and combination units ready to set in place with a minimum of field labor. The design of sash and frame provide a positive weathering. All corners are welded making a solid unit of great rigidity.

Full details furnished on request.

## CANADIAN STEEL CASEMENTS

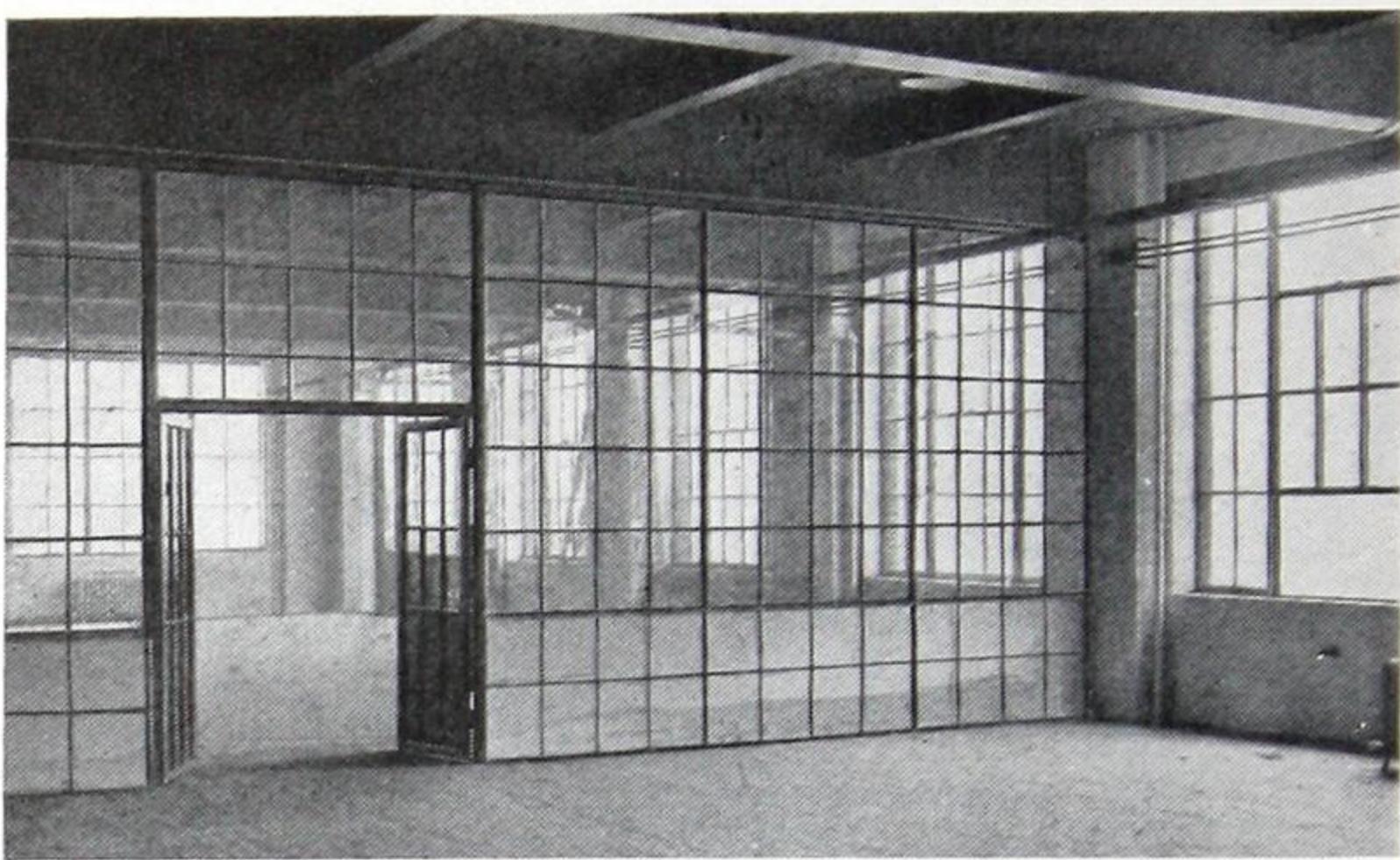
Especially designed for Schools, Apartments, Banks,  
Churches and Office Buildings.



The above detail shows a typical side-hinged outward opening casement.

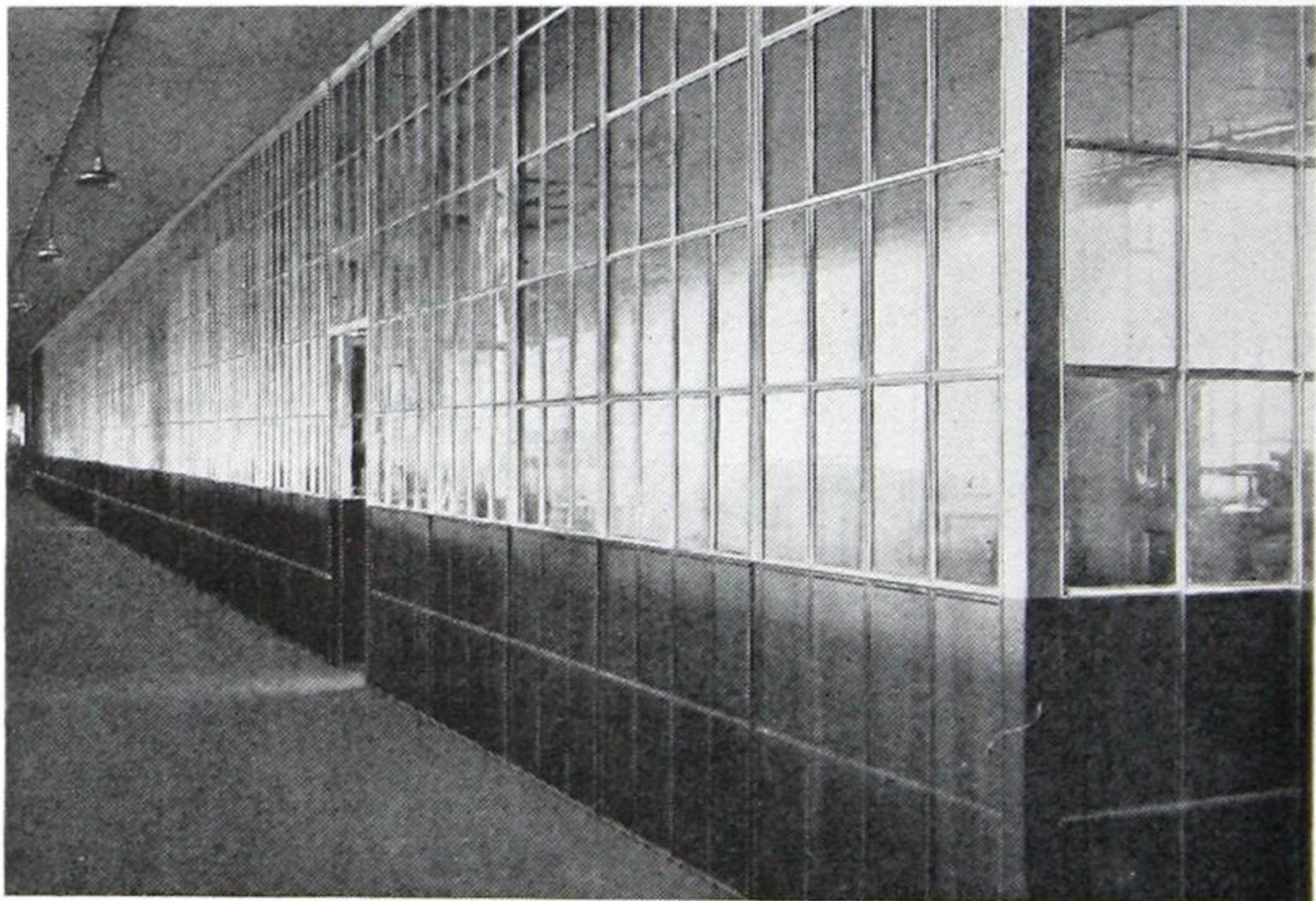
Details for other types and further information on request.

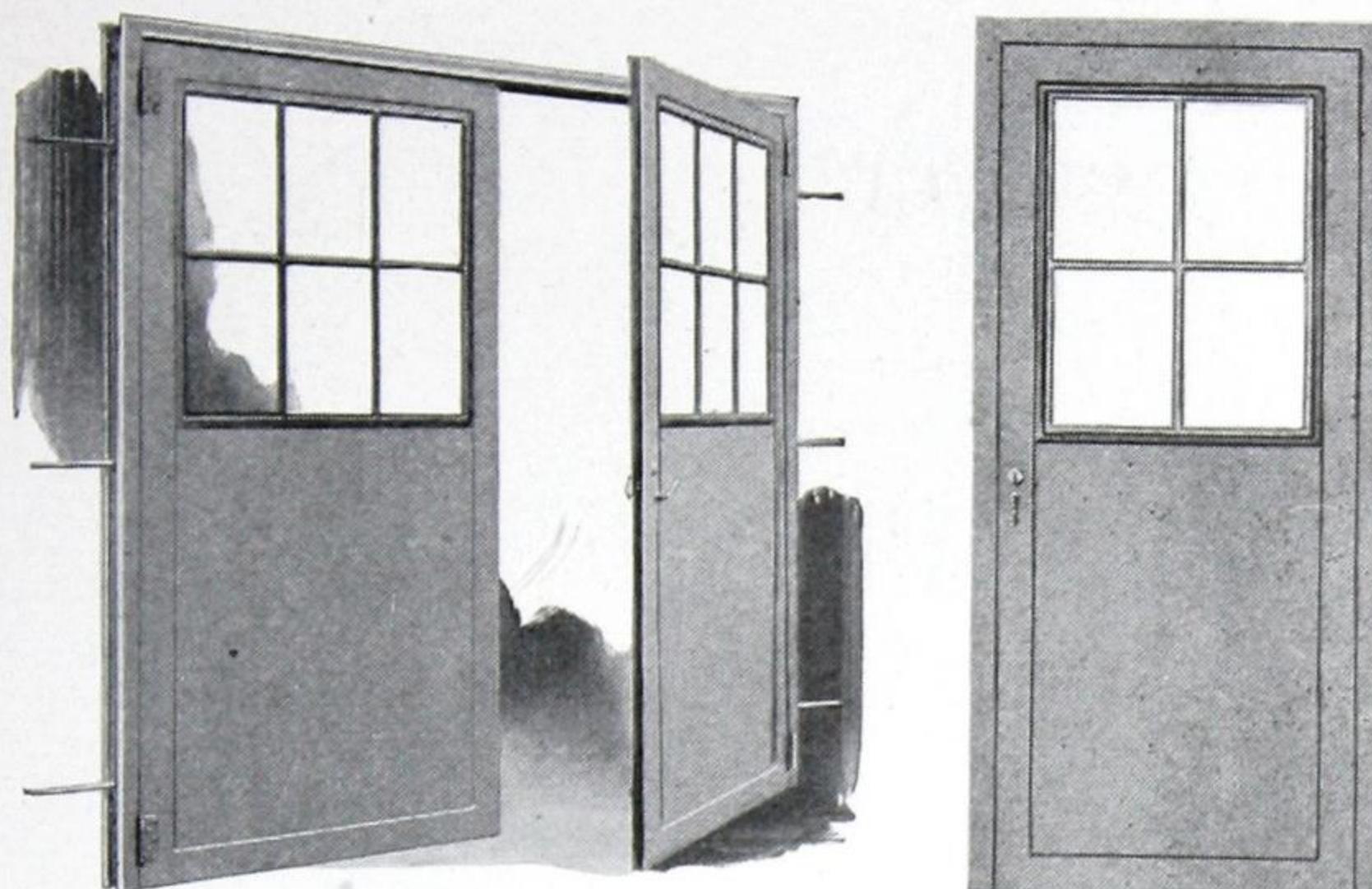
## TRUSCON STEEL PARTITIONS



OFFICES in factories, cafeterias, stock and shipping rooms of industrial and commercial buildings are economically and efficiently made by using Truscon steel fireproof partitions. The partitions are made up with steel sash and steel panels.

Further details on request.





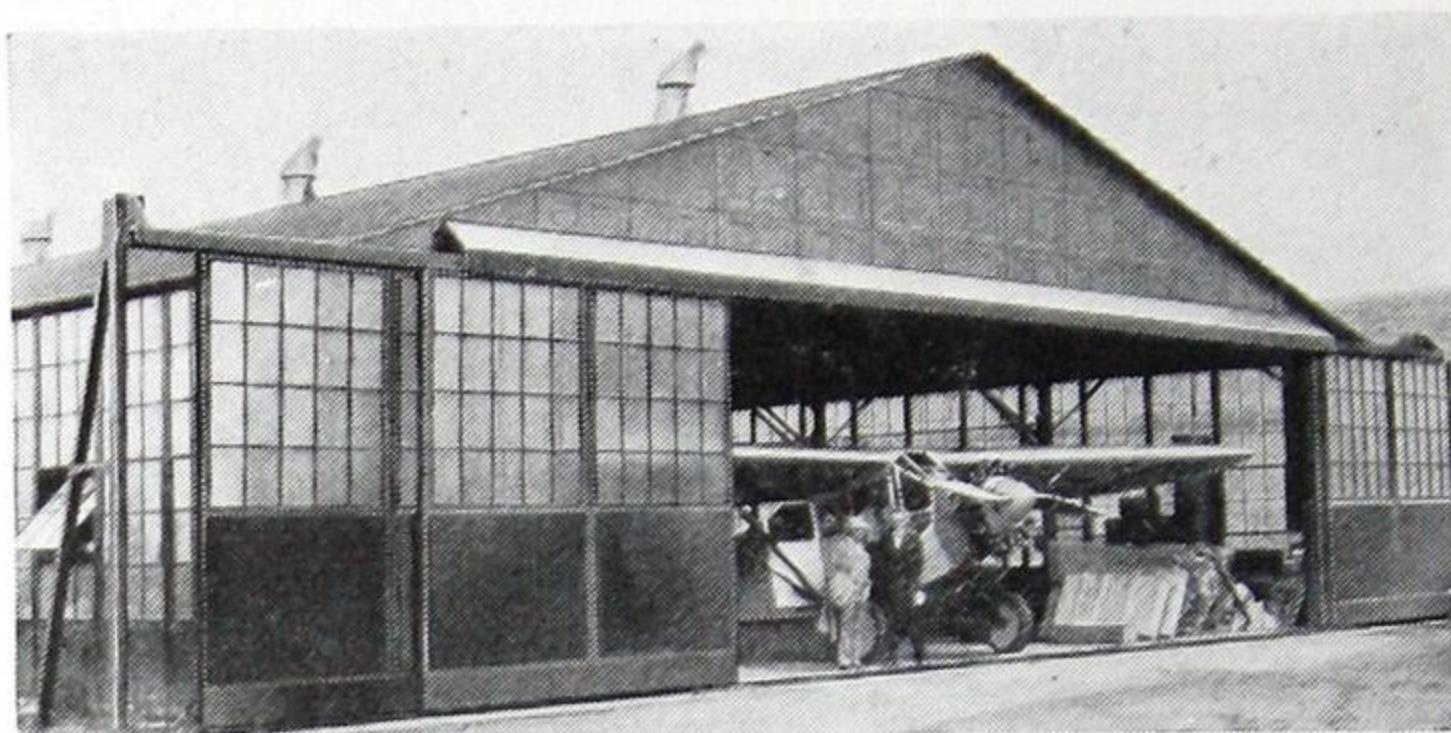
## TRUSCON STOCK TYPE STEEL DOORS

BUILT to withstand hard usage, Truscon Steel Doors are well adapted to the constant service required of doors in Factories, Warehouses, Depots, Garages, Service Stations and similar structures. Being made of Copper-Alloy Steel they are fire safe and rust-resisting.

Truscon Standard Stock Type Steel Doors are made of carefully formed steel sections, reinforced at the corners. The joints are electrically welded. They are easy to open and close and always fit snugly in the door frame because they will not warp, swell or get out of alignment.

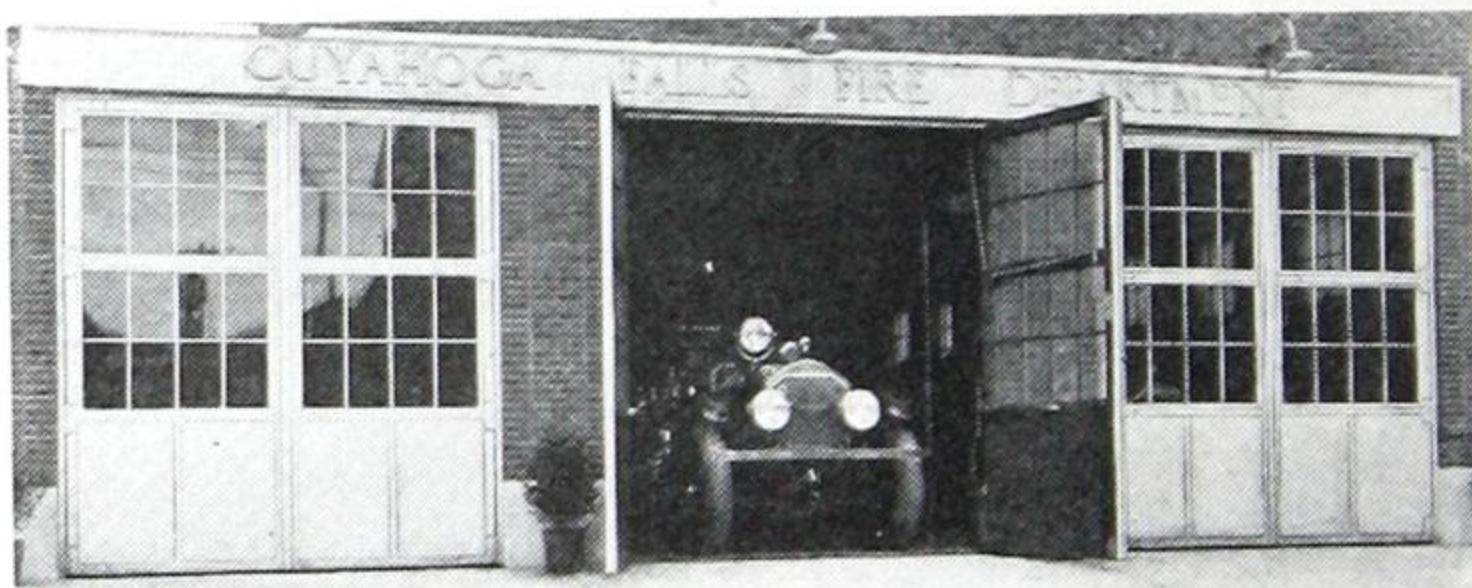
Truscon Steel Doors are available with sash or solid panels, in four standard stock sizes which can be used singly or in combination for door openings of different dimensions. The hardware equipment supplied with each unit converts the standardized door panels into either the swing or slide type of Truscon Steel Door as required.

The satisfactory performance of those functions which are expected of doors under ideal operating conditions, is the standard of service consistently rendered by Truscon Steel Doors under extreme as well as ordinary circumstances.



## TRUSCON AIRPLANE HANGAR STEEL DOORS

TRUSCON Hangar Doors have been perfected to meet aeronautical requirements of any nature and are made in sizes to fit individual installations. They are as light in weight as consistent with proper strength and durability. These doors are usually made of units which run on tracks embedded in the floor, relieving the overhead construction from supporting their weight and effecting important savings in the roof structure. They are furnished in either a straight slide type or a curved track type as desired.



## TRUSCON FIRE DEPARTMENT STEEL DOORS

DESIGNED especially to meet the unique requirements of fire and police stations for quick acting sturdy doors that can be relied upon to function perfectly at all times. Furnished either in the double swing type as illustrated or in the vertical folding type, with or without automatic operating device.

## TRUSCON STEEL LOCKERS



TRUSCON Lockers are made of a superior grade No. 22 Gauge pickled and leveled steel, the front of locker and door frame being reinforced with a steel "T" frame.

The door is made of  $\frac{3}{4}$ " x  $\frac{3}{4}$ " x  $\frac{1}{8}$ " Tees mitred at corners, bent and welded, making a continuous frame. The door sheets are formed at right angles giving additional reinforcing and electric spot-welded to Tee. The doors overlap the locker frame forming neat close joints.

The door is hung on wrought steel hinges, specially formed and riveted to door and locker frame, only hinge barrel being exposed.

The locking device is simple three point, locking at center, top and bottom giving complete security. The handle is neat and strong, shaped to suit the fingers. It has an attachment which can be used for a padlock to lock the three point locking device. Truscon lockers can be equipped with Yale Master Keyed or combination locks at special prices.

Door ventilation is provided by five louvres at top and bottom, hole in back of locker also if required.

Lockers 15" square have three double coat hooks—all others are provided with two double coat hooks.

Lockers have one shelf 9" from top, unless otherwise specified.

Lockers supplied with adjustable feet approximately 6" high if required.

Lockers are given two coats of bottle green enamel baked on.

#### STANDARD LOCKER SIZES:

12" wide x 12" deep x 60" high

12" wide x 15" deep x 60" high

15" wide x 15" deep x 60" high

A 15" wide x 15" deep x 66" high

12" wide x 12" deep x 72" high

12" wide x 15" deep x 72" high

12" wide x 15" deep x 66" high

A has partition making double locker.

12" wide x 12" deep x 48" high

12" wide x 15" deep x 48" high

12" wide x 12" deep x 42" high

12" wide x 15" deep x 42" high

This group fitted with two coat hooks, but no shelf.

#### DOUBLE TIER LOCKERS

12" wide x 12" deep x 36" high

12" wide x 15" deep x 36" high

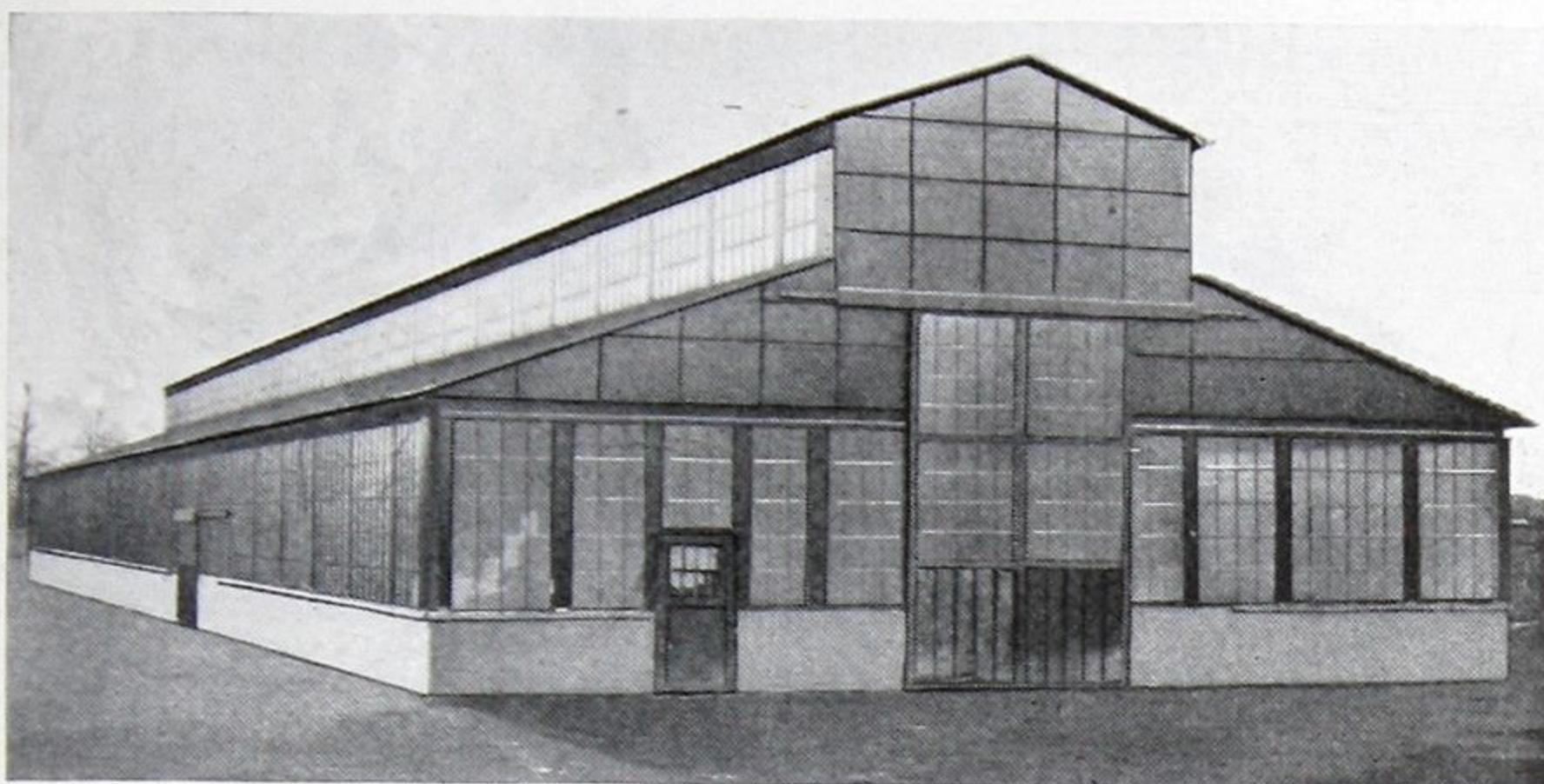
12" wide x 12" deep x 42" high

12" wide x 15" deep x 42" high

15" wide x 15" deep x 36" high

15" wide x 15" deep x 42" high

This group fitted with two coat hooks, but no shelf.



## TRUSCON STANDARD BUILDINGS

TRUSCON Standard Buildings are built of standard units of uniform size, interchangeable, and assembled by means of a simple locking device consisting of a slotted bolt and wedge. This construction furnishes a strong, permanent, fireproof structure that can be rapidly taken down and re-erected in a new location with a 100% salvage value.

The wall panels are of Truscon Alloy Steel, a material of proven durability—rigid and substantial. The steel windows are welded into the steel panels, affording maximum daylight and ventilation. The steel doors are furnished either single or double and are equipped with Yale locks and Stanley hinges. The steel roof trusses support steel roof plates, weather-tight. The building is thoroughly braced throughout and extremely rigid.

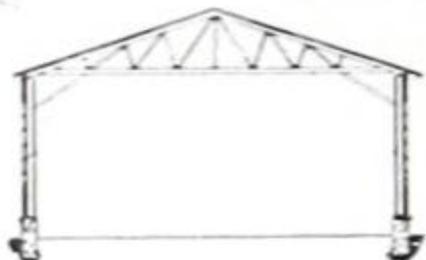
Truscon Standard Buildings provide economical, permanent construction for factories, warehouses, foundries, shops, oil buildings, railroad buildings, garages, filling stations, etc., etc.

Truscon Standard Buildings are furnished in all sizes with pitched, monitor or sawtooth roof. As panels are interchangeable, any desired arrangement of wall, windows and doors can be obtained.

Buildings can be taken down and re-erected, re-arranged, enlarged or reduced.

For complete information write for Truscon Standard Building catalog.

**TRUSCON STANDARD BUILDINGS**  
**PITCHED ROOF TYPES—SERIES “A” AND “C”**  
*with Interlocking Plate Type Roofs  
 or “Steeldeck” Roofs*



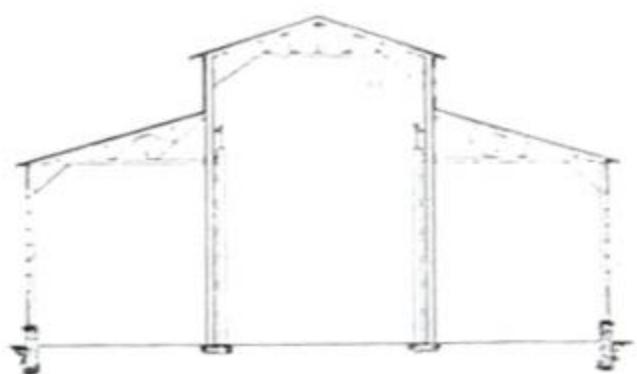
**TYPE 1 AND 1-S**  
 Widths—8'-12'-16'-20'-24'-28'-32'-  
 40'-50'-60'-70'-80'-90'-100'  
 Lengths—Multiples of 2'-0"



**TYPE 2**  
 Widths—40'-48'-50'-56'-60'  
 Lengths—Multiples of 2'-0"



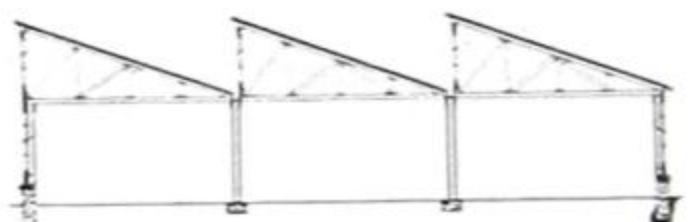
**TYPE 3**  
 Widths—56'-60'-64'-68'-72'-76'-80'-  
 84'-88'-96'-98'-106'-108'-116'  
 Lengths—Multiples of 2'-0"



**TYPE 3-M**  
 Widths—60'-64'-68'-72'-76'-80'-84'-  
 88'-90'-96'-98'-100'-106'-108'-116'  
 Lengths—Multiples of 2'-0"



**TYPE 4**  
 Widths—80'-100'-112'  
 Lengths—Multiples of 2'-0"



**SAWTOOTH TYPE**  
 Widths—Any Multiple of 28'-0"  
 Lengths—Multiples of 2'-0"

Standard Heights of Sidewalls:  
 8'-1", 10'-9", 13'-5", 16'-1", 18'-9", 21'-5"

Standard Curb Heights: 8", 16", 24"

## TRUSCON STANDARD BUILDINGS

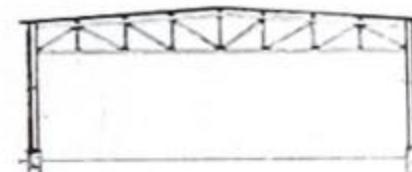
### FLAT ROOF TYPES—SERIES “B”

*furnished with “Steeldeck” Roofs, Insulated  
and Waterproofed*

#### TYPE 1

Widths—20'-24'-28'-32'-36'-40'-44'-  
48'-50'-52'-56'-60'-70'-80'-90'-100'

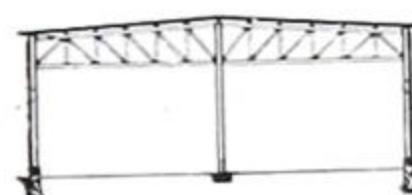
Lengths—Multiples of 2'-0"



#### TYPE 2

Widths—40'-48'-56'-60'-64'-80'-100'-  
120'

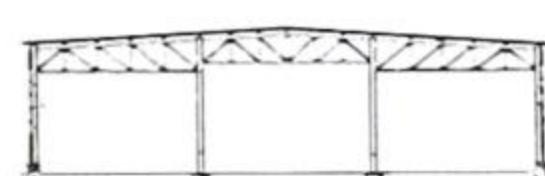
Lengths—Multiples of 2'-0"



#### TYPE 3

Widths—60'-64'-68'-72'-76'-80'-90'-  
94'-98'-116'-120'-130'-140'-150'-  
160'-170'-180'

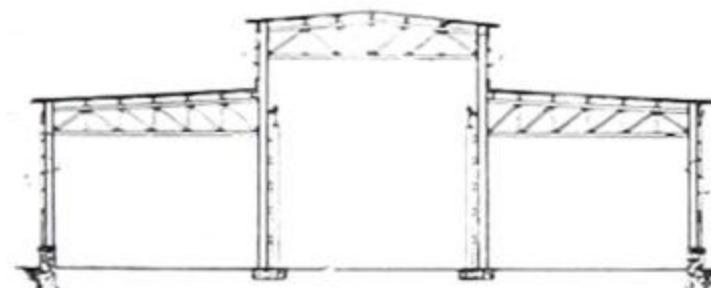
Lengths—Multiples of 2'-0"



#### TYPE 3-M

Widths—60'-64'-68'-72'-76'-80'-84'-  
88'-90'-96'-98'-100'-104'-106'-108'-  
112'-114'-120'-124'-130'-132'-  
140'-150'-160'-170'-180'

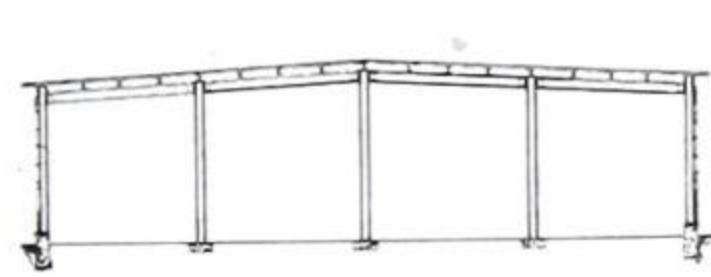
Lengths—Multiples of 2'-0"



#### TYPE 4

Widths—80'-88'-96'-100'-104'-108'-  
112'-116'-120'

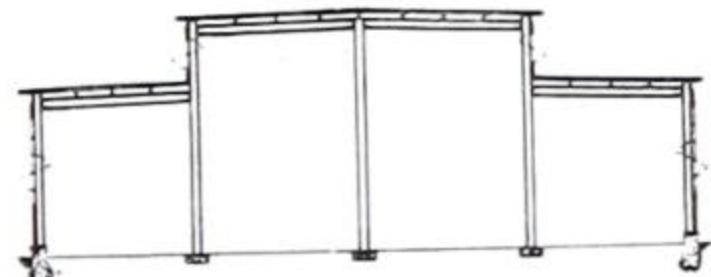
Lengths—Multiples of 2'-0"



#### TYPE 4-M

Widths—80'-88'-96'-100'-104'-108'-  
112'-116'-120'

Lengths—Multiples of 2'-0"



#### Standard Heights of Sidewalls:

11'-5", 14'-1", 16'-9", 19'-5", 22'-1", 24'-9", 27'-5",  
30'-1", 32'-9".

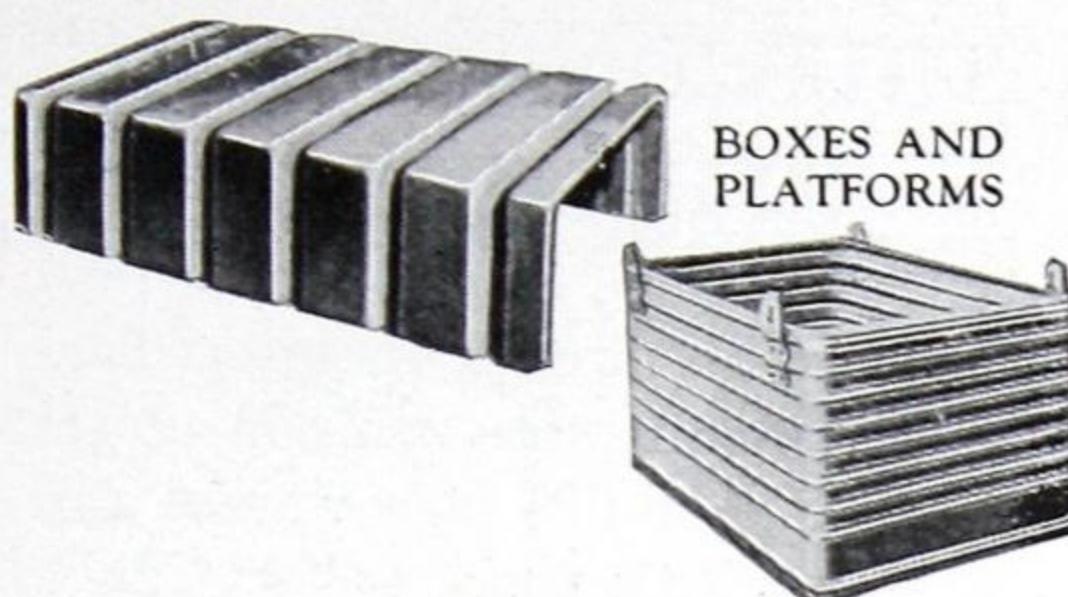
Standard Lantern, 16 feet wide, can be placed on any of the Series “B” Truscon Standard Buildings.



## TRUSCON HANGAR WITH LEANTO FOR MACHINE SHOP AND OFFICES

THE shelter requirements in the field of aeronautics are distinctly different from those encountered in other fields. Airplane Hangars must be laid out in clear spans so that the entire floor space is unobstructed, allowing maximum freedom in handling ships. Doors of unusual width must be provided in one or both ends of the building to permit easy entrance and egress of the planes. The entire building should be non-combustible because of the unusual fire risk. Furthermore, the impossibility of foreseeing future needs, makes it advisable to select buildings with a high salvage value; buildings that may be taken down and re-erected at a new site or enlarged to take care of increased requirements.

Types and sizes of Truscon Standard Buildings are listed on pages 58 and 59.

BOXES AND  
PLATFORMS

## TRUSCON BOXES AND PLATFORMS

TRUSCON Boxes and Platforms adapted to all types of material handling. They are designed for efficiency and durability; they save labor cost, permit material handling in less time, and increase production.

Truscon Boxes and Platforms are of rigid rib construction and can be made in any size or gauge metal to suit individual requirements. Manufactured of rust-resisting Copper Alloy Steel they last almost indefinitely and their maintenance is practically negligible.

Your inquiries for Truscon material handling equipment will have our prompt attention.

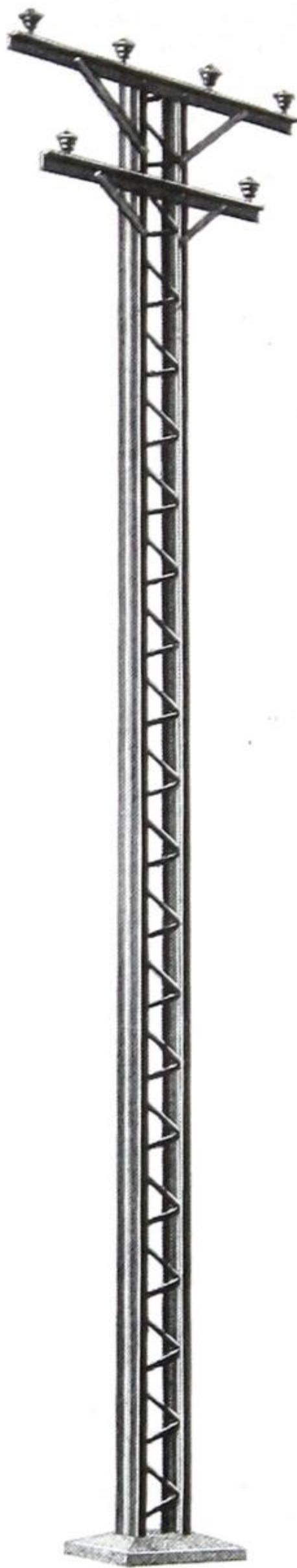
FOUNDRY  
FLASKS

## TRUSCON FOUNDRY FLASKS

TRUSCON Alloy Steel Foundry Flasks are the result of development based upon years of practical experience by foundrymen with all types of foundry equipment. Every Truscon Flask is designed and built to meet the particular requirements of the individual job. The correct thickness of the walls of the flask, the proper placing of the flanges, the types of handles, lugs, dowel pin brackets—these details are all given careful consideration.

## TRUSCON WELTRUS STEEL POLES

THE Weltrus Pole is the most economical type of steel pole yet developed. It resists more pounds of transverse load, per pound of pole weight and per dollar of cost, than other poles. This is the correct measure of pole economy and efficiency.



The pole is composed of two channel chord members rolled in one continuous length from special sections of Copper-Bearing Steel. The chords are connected at suitable intervals by a continuous lattice web member, made from plain, round sections, thus forming a simple Warren Truss.

Connections are autogenously welded by automatic machinery which accurately regulates the time, current and pressure uniformity of each weld.

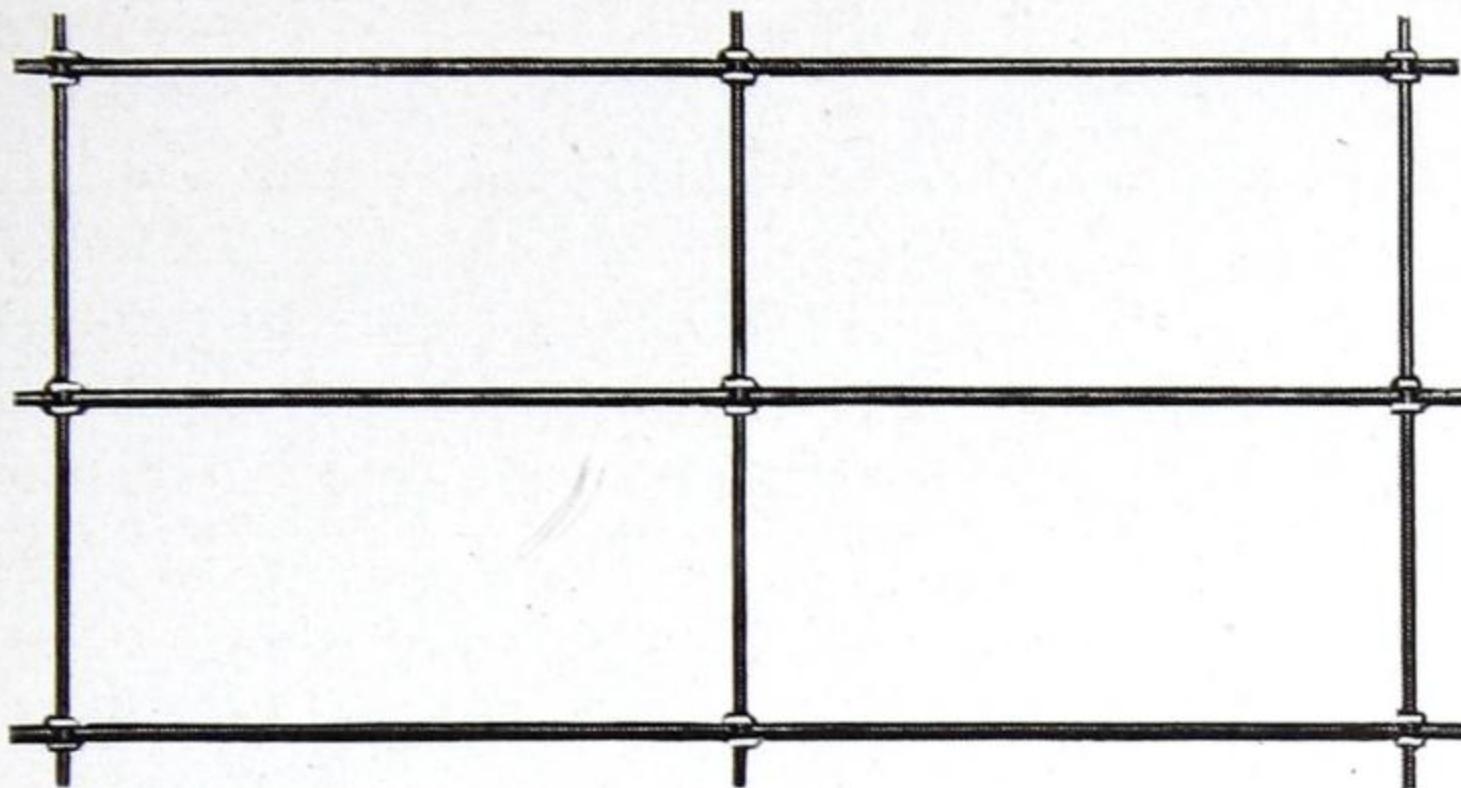
The unique economy and efficiency of this construction will be apparent to engineers familiar with the intricacies of former methods of pole manufacture.

### FIRST COSTS

The hitherto unattained economy of design and manufacture of Weltrus Poles make it possible for the first time, to build strong, permanent, all-steel lines in open country at the cost of wood construction.

We solicit an opportunity to demonstrate the fact on your next projected installation. The comparison of costs will be interesting and convincing. The services of one of our engineers to consult with your staff is available without obligation.

A copy of our Weltrus Pole catalog will gladly be sent on request.



## TRUSCON WIRE MESH

THE necessity for using steel reinforcement in concrete roads is generally recognized by leading engineers. Many highway department engineers are specifying wire mesh in flat sheets.

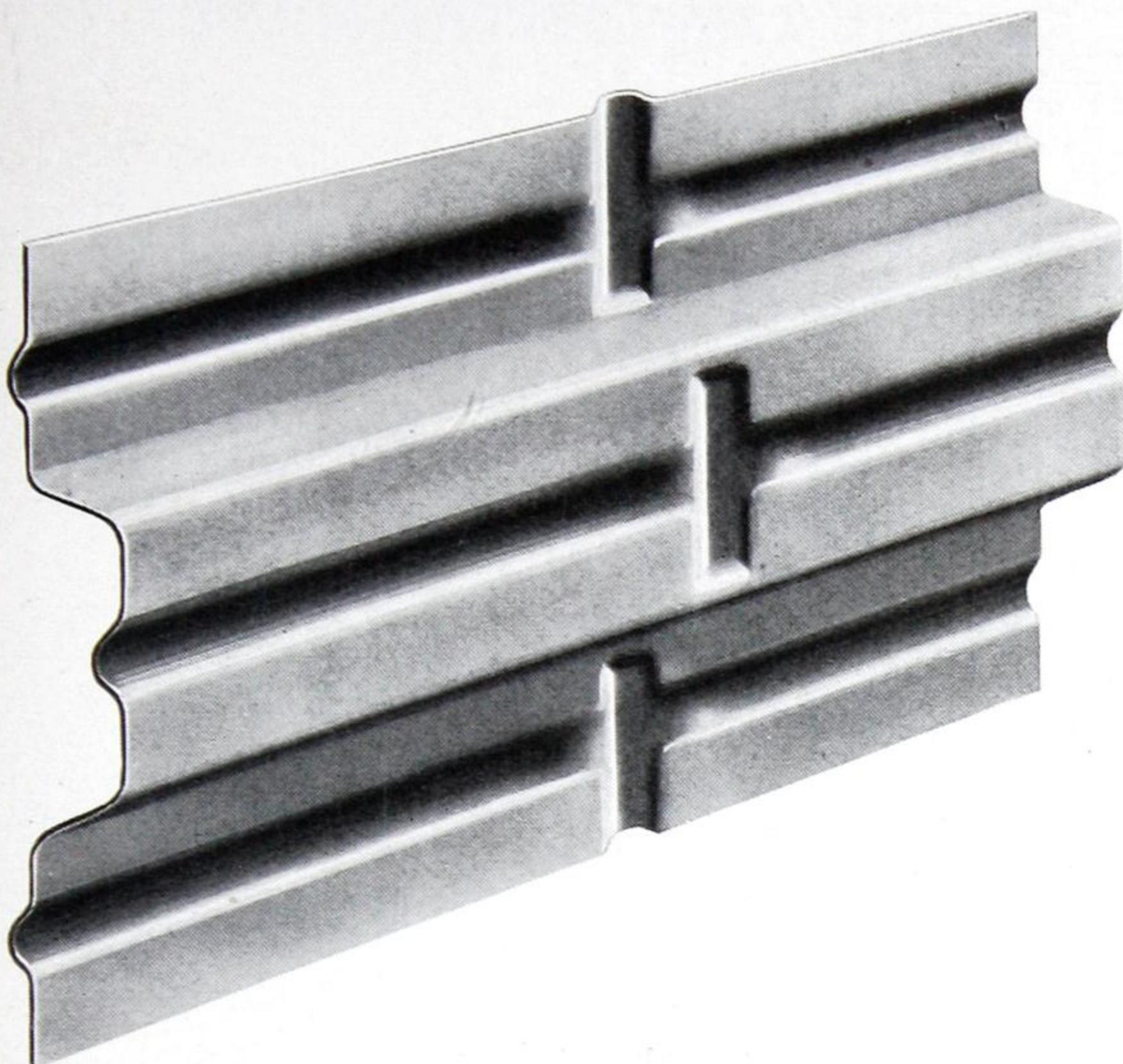
Truscon Wire Mesh is the ideal reinforcement for concrete roads. It is furnished in weights and areas as desired, in large flat sheets cut to length and ready for placing in the concrete. No extra expense for cutting, straightening, uncoiling or fastening in place. It is a sheet of many bars handled as a single unit, with rigidly connected joints so that the sheets stay true and flat in handling and after placing.

For reinforcing concrete floors, walls, etc., any desired area of mesh can be furnished, including mesh with equal areas in both directions for temperature reinforcing.

## STANDARD TYPES OF TRUSCON WIRE MESH

Style	Spacing		Gauge		Sect.	Area	Approx. Weight Per 100 Sq. Ft.
	Main	Secondary	Main	Secondary	Main	Secondary	
192-6	6"	12"	No. 6	No. 6	.058"	.029"	32.8
	6"	6"	No. 6	No. 6	.058"	.058"	43.8
207-11	6"	12"	No. 5	No. 11	.067"	.011"	30.0
	6"	6"	No. 5	No. 11	.067"	.023"	35.3
207-6	6"	12"	No. 5	No. 6	.067"	.029"	36.5
	6"	6"	No. 5	No. 6	.067"	.058"	47.5
225-11	6"	12"	No. 4	No. 11	.08"	.011"	34.6
	6"	6"	No. 4	No. 11	.08"	.023"	39.9
225-6	6"	12"	No. 4	No. 6	.08"	.029"	41.1
	6"	6"	No. 4	No. 6	.08"	.058"	52.3
225-4	6"	12"	No. 4	No. 4	.08"	.04"	45.0
	6"	6"	No. 4	No. 4	.08"	.08"	60.0
250-11	6"	12"	$\frac{1}{4}"$	No. 11	.1"	.011"	41.4
	6"	6"	$\frac{1}{4}"$	No. 11	.1"	.023"	46.7
250-6	6"	12"	$\frac{1}{4}"$	No. 6	.1"	.029"	47.8
	6"	6"	$\frac{1}{4}"$	No. 6	.1"	.058"	59.0
250-4	6"	12"	$\frac{1}{4}"$	No. 4	.1"	.04"	51.8
	6"	6"	$\frac{1}{4}"$	No. 4	.1"	.08"	66.7
250- $\frac{1}{4}$	6"	12"	$\frac{1}{4}"$	$\frac{1}{4}"$	.1"	.05"	55.1
	6"	6"	$\frac{1}{4}"$	$\frac{1}{4}"$	.1"	.1"	73.0
307-11	6"	12"	No. 0	No. 11	.148"	.011"	60.1
	6"	6"	No. 0	No. 11	.148"	.023"	65.7
307-6	6"	12"	No. 0	No. 6	.148"	.029"	66.4
	6"	6"	No. 0	No. 6	.148"	.058"	77.9
307-4	6"	12"	No. 0	No. 4	.148"	.04"	70.3
	6"	6"	No. 0	No. 4	.148"	.08"	85.5
3/0-11	6"	12"	No. 3/0	No. 11	.206"	.011"	82
	6"	6"	No. 3/0	No. 11	.206"	.023"	87.6
3/0-6	6"	12"	No. 3/0	No. 6	.206"	.029"	88
	6"	6"	No. 3/0	No. 6	.206"	.058"	99.6
3/0-4	6"	12"	No. 3/0	No. 4	.206"	.04"	92
	6"	6"	No. 3/0	No. 4	.206"	.08"	107.5
375-6	6"	12"	$\frac{3}{8}"$	No. 6	.221"	.029"	93.8
	6"	6"	$\frac{3}{8}"$	No. 6	.221"	.058"	105.4
375-4	6"	12"	$\frac{3}{8}"$	No. 4	.221"	.04"	96.7
	6"	6"	$\frac{3}{8}"$	No. 4	.221"	.08"	113.0

Truscon Mesh is manufactured in widths up to 6 feet. Standard lengths are up to 18 feet, but in special cases greater length can be supplied.



## TRUSCON CENTRE JOINT

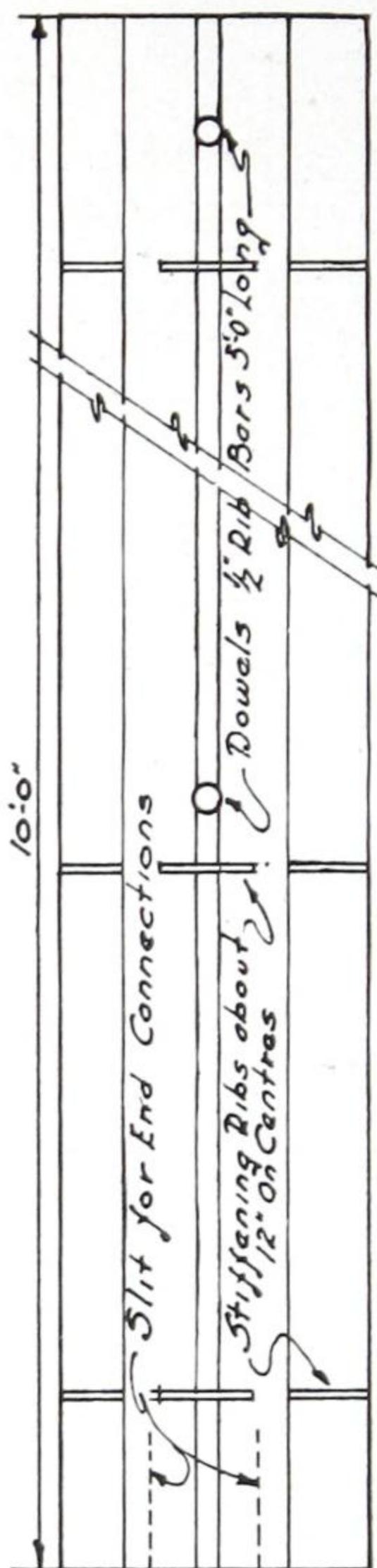
THE best way to build a concrete road is to use a combination of reinforcing steel and contraction joints. The contraction joint provides a definite plane of weakness in the pavement and thus forms a straight regular crack for contraction and expansion.

The central, longitudinal joint is necessary because the repeated expansion and contraction of the concrete (especially the upper surface) lifts the sides of the pavement off the grade with the result that traffic readily cracks the concrete at the sides. This joint is purposely made wider to act as a marker for dividing the traffic.

Truscon Dowel Centre Joints are made of 20 gauge plate ribbed and corrugated and are rigid, substantial and easy to handle. Dowels in the plate dovetail the adjoining sections of the road together, preventing one part from rising above the other. Angle stakes hold the plates accurately and rigidly in place. Holes may be punched in the joint for dowel bars, where called for.

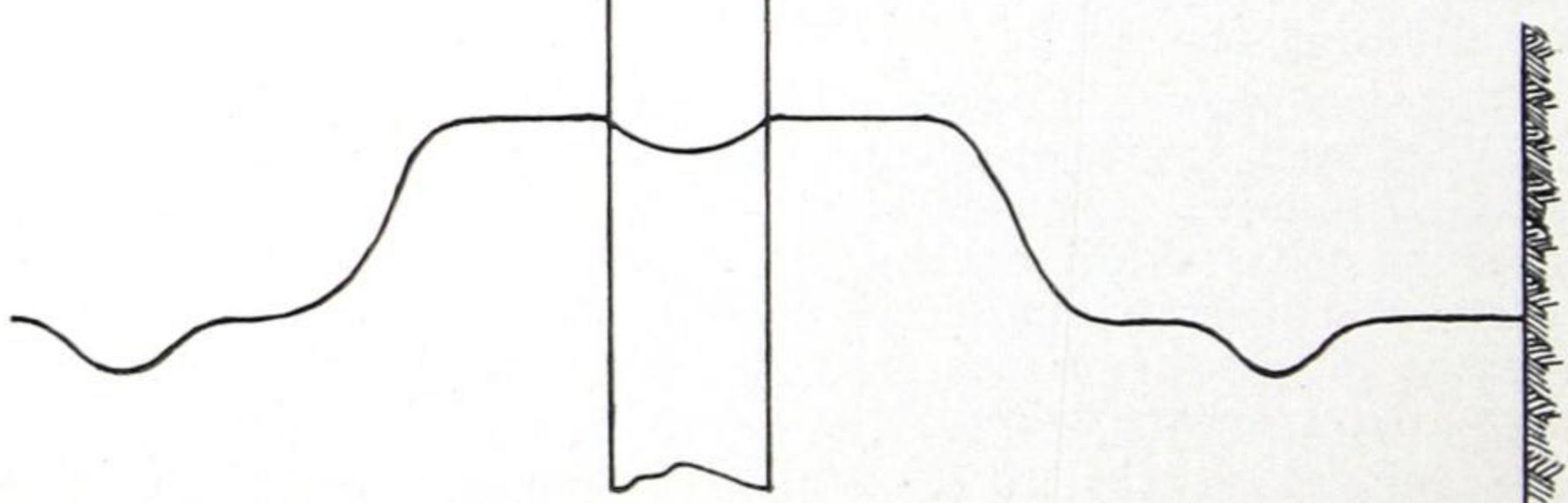
Standard lengths, 10 feet.

## TRUSCON CENTRE JOINT

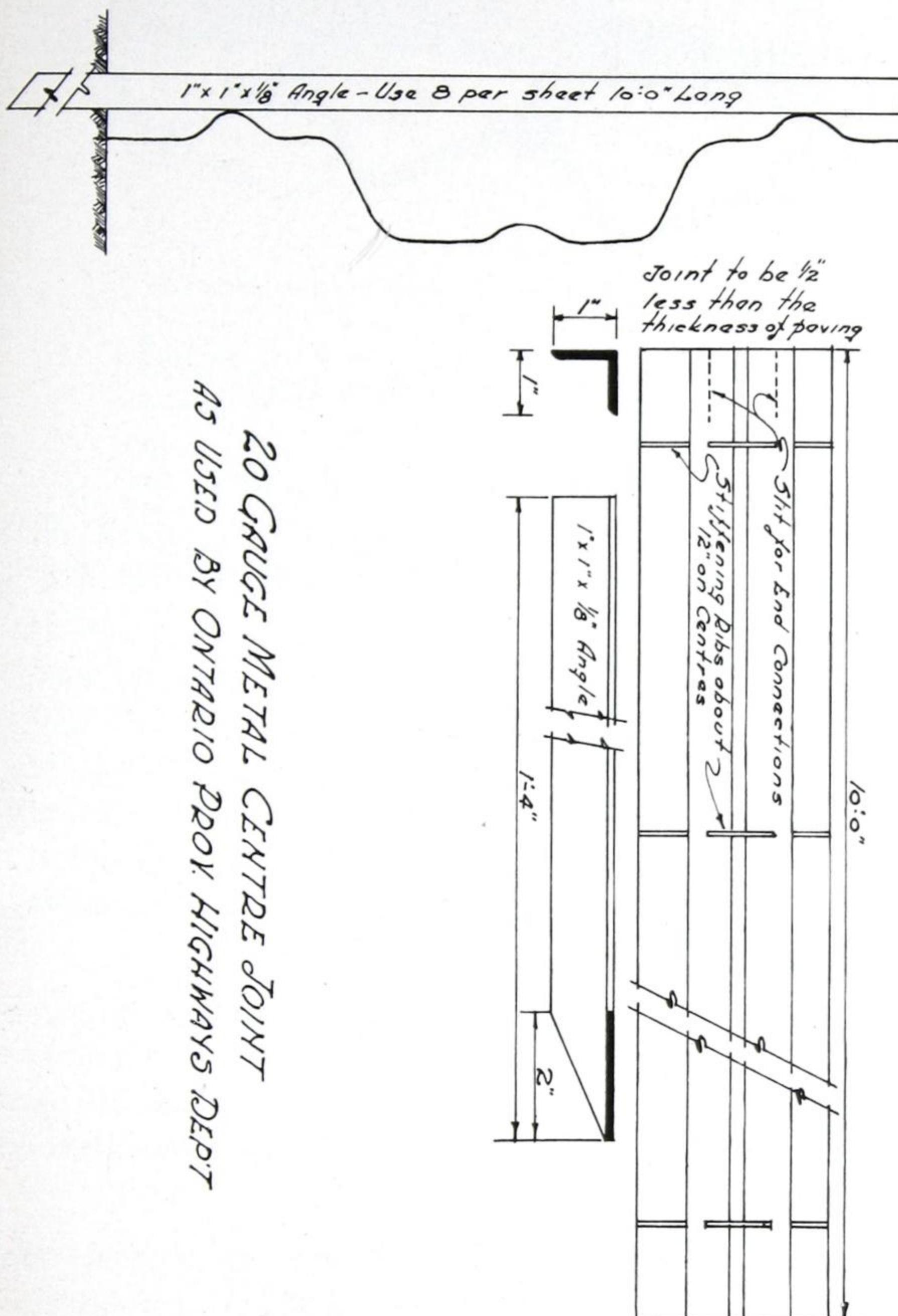


Width of Joint to be  $\frac{1}{2}''$  less than thickness of pavement.

$\frac{1}{2}''$  Rib Bar Dowels approx. 5:0" on centres



## TRUSCON CENTRE JOINT





1  $\frac{5}{8}$ " Protection Edge for Concrete Curbs

## TRUSCON CURB BARS

TRUSCON Curb Bars provide a substantial protection and reinforcement for concrete curbs. They are manufactured from special rolled steel sections under powerful machinery.

The plate and anchorage are formed from the same section of steel insuring uniform distribution of shocks throughout the concrete and preventing the loosening of the plate. The anchorage is positive and is entirely independent of adhesion of the concrete. Owing to the open spaces in the anchorage, there is no separating or splitting of the concrete at the corners.

Owing to their rigidity and convenient size, Truscon Curb Bars are easy to handle and install. Concrete curbs protected with Truscon Curb Bars make the best and most economical curbing for either business or residential streets.

Truscon Curb Bars are manufactured from the highest grade of open hearth steel and are heavily galvanized after forming.

Standard lengths, 6, 8, 10 and 12 feet.



1" Protection Edge for Exposed Corners

## TRUSCON EDGE PROTECTOR

THE Truscon Edge Protector follows the same general principle of design and manufacture as Truscon Curb Bars, differing only in that it provides a 1" protection edge instead of  $1\frac{5}{8}$ ". The smaller protection is entirely ample for many conditions such as in the exposed corners of walls, pilasters, columns, platforms and sidewalks.

The Truscon Edge Protector can also be used, if preferred, for concrete curbs just as the Truscon Curb Bar can be used in connection with columns and other interior work.

Every advantageous feature necessary for the protection of concrete corners is incorporated in the Truscon Curb Bar and Edge Protector. They not only protect but actually reinforce the concrete. The integral anchorage distributes shocks throughout the concrete mass.

Truscon Edge Protectors are manufactured from the highest grade of open hearth steel and are heavily galvanized after forming.

Standard lengths, 6, 8, 10 and 12 feet.

## TRUSCON PRESSED STEEL DOOR FRAMES

TRUSCON Steel Door Frames are pressed from 16 gauge steel with all joints electrically welded.

They are made in three standard sizes, either with or without transoms, for:

2" Solid Partitions (2" overall dimensions).

3" Terra Cotta Partitions (approximate 4½" overall).

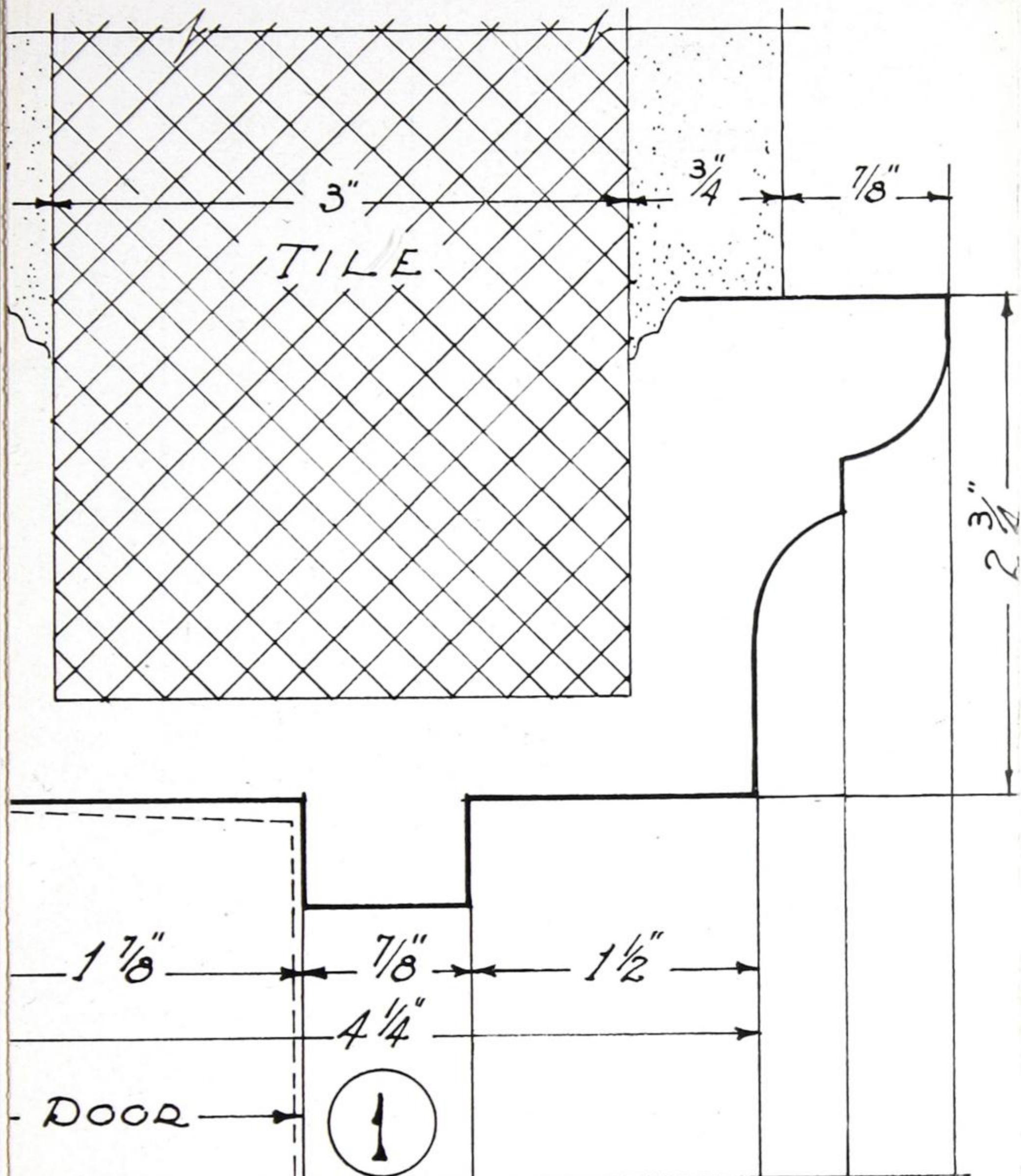
4" Terra Cotta Partitions (approximate 5½" overall).

By using Steel Door Frames the swelling and shrinking from dampness causing sagging and binding so common with wood frames, is eliminated.

These frames are cheaper than wooden frames and save time and labor in installation.

These facts make it quite apparent that on large buildings such as hotels, apartments, and office buildings, the metal frame, owing to its initial low cost, durability and economical installation, is a desirable factor in present day building.

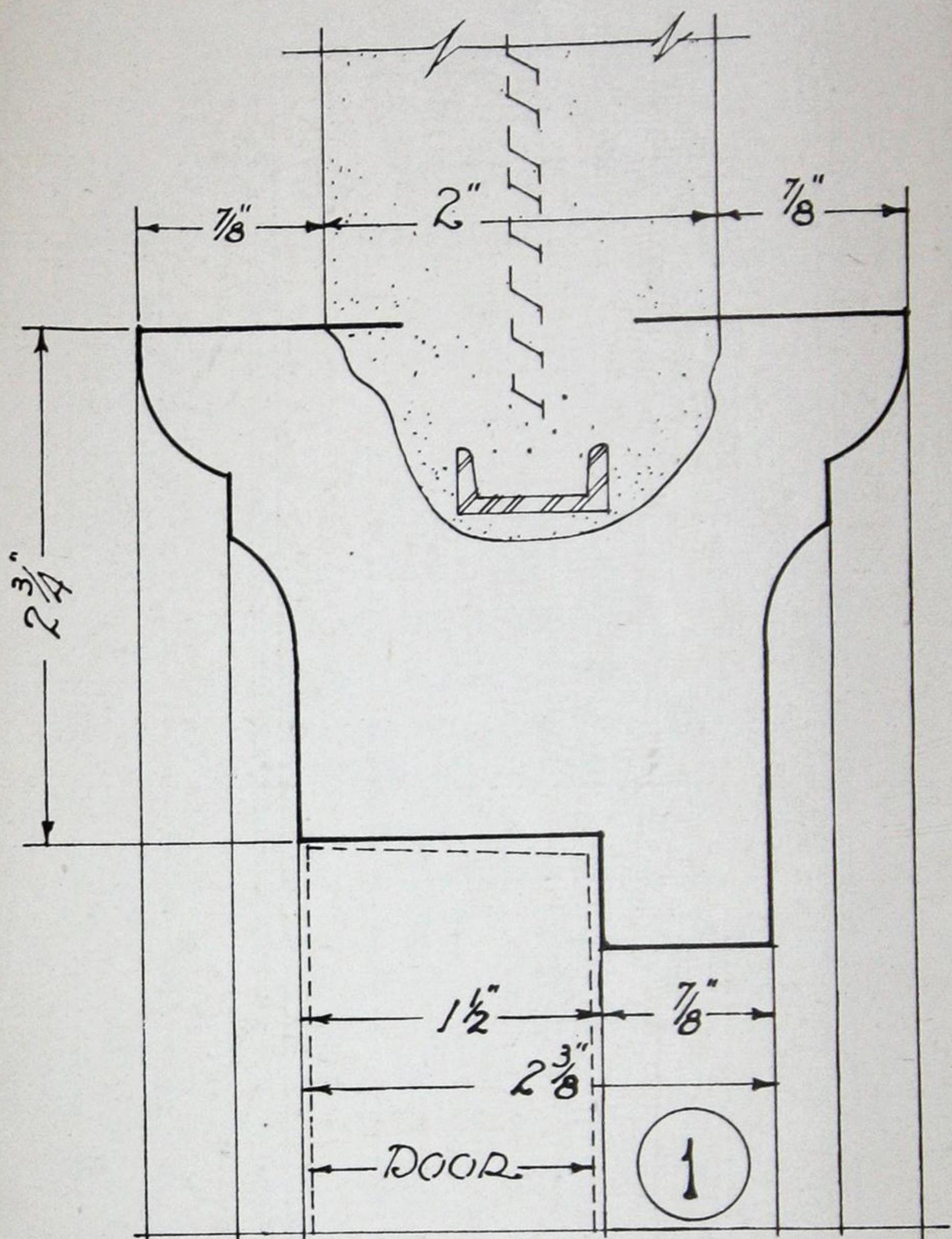
Frames are shipped prepared to receive all hardware.



HEADERS

SCALE

F



FULL SIZE



TRUSCON PRESSED STEEL DOOR FRAMES